

# **User's manual for DVR**

\*This manual is tailored for MPEG4-100FPS/120FPS 9-channel and 16-channel digital video recorder

\*This manual takes 16-channel digital video recorder as example

Before operation, we strongly advise you to read the user manual and keep it properly for later using.

This manual is an operation guide but not quality warranty. We may reserve the rights of amending the typographical errors, inconsistencies with the latest version, software upgrades and product improvements, interpretation and modification. These changes will be published in the latest version without special notification.

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# Digital Video Recorder (DVR) Introduction

## 1.1 Product introduction

This DVR is designed specially for CCTV system. It adopts embedded processor and embedded operating system working with the high-powered code and decode chip. In addition, absorbing advanced IT technology makes the system more stable, such as the audio code and decode technology, big capacity hard disk, complying with the TCP/IP protocol, SoC, etc...

It is a stand alone unit, but also works on internet, to allow customer to have remote surveillance. It is ideal for middle-risk to high-risk site surveillance system. Due to its good performance, it is widely installed and used in Banks Industry, Telecommunication System, Electricity Power department, Law System, factories, storehouses and uptowns, etc...

## 1.2 Features of this DVR

### **General**

- Video output: CVBS, S-VIDEO, VGA and SPOT monitor
- Triplex operation : view/record/playback/remote operate at the same time

- Various recording resolutions, D1, Half D1 and CIF
- Support channel security by hiding live display
- Display the local record state and the basic information
- Remote controller equipped
- Support two level password control: administrator and common user
- Operation log recording and searching
- Video system (PAL or NTSC) can be detected automatically and selected manually
- Recording list can be deleted one by one or by all and locked to protect the important records
- Support water mark technology

#### **Format**

- Standard MPEG-4 compression format

#### **Storage**

- Support to carry up to four IDE HDD simultaneously (Or three IDE HDD and one IDE DVD-RW/CD-RW)

#### **Backup**

- Auto-play software automatically packed in backup files, and Auto-water-mark check in backup files to assure files' authenticity
- Support backup via USB 2.0 to USB flash memory, or CDRW,DVD-RW to CD-R/DVD-R respectively
- Support remote backup by "Net Client" through LAN or internet

#### **Record and playback**

- Record modes: Manual, Sensor detection, Timer, Motion detection and Continuous

- Support HDD recycle
- Up to 16CH playback, fast forward (2X, 4X, 8X, 16, 32X, 64X and 128X) and slow forward modes; play the record frame by frame; jog shuffle to forward/backward function, which is including frame rate adjusting
- Support remote playback in "Net Client" through LAN or internet
- Three record search mode: time search, event search, file search

#### **Alarm**

- 9/16 alarm inputs and 4 alarm outputs, TTL alarm output

#### **PTZ control**

- Support decoder which communicates with RS485
- Support speed dome
- Support PTZ through network

#### **Communication port**

- RS 485 equipped


#### **Network**

- Support TCP/IP protocol
- Support wide bandwidth network through modem (PPPOE)
- Support static IP and dynamic IP (DHCP)
- On time preview/playback/monitoring with audio signal through network
- Support control PTZ camera through the network



➤ Support IE browser, for remote view (automatically download active-x )

# Installation Notice

 **Attention:** Before connecting to the other equipments, please make sure that the device is powered off. Do not hot plug in!

## 2.1 Check the accessories in the carton

Check accessories when you receive the machine, to make sure you have all the parts. Normally it shall contain: a remote controller, a power cable, a CD-Rom with “Net Client” software, screws for installing HDD

## 2.2 Install the HDD

### 2.2.1 Install reminder

Please affirm the size of HDD needed and choose the suitable ones to install. If the origin DVR does not have HDD, let the professional install/uninstall the device.

### 2.2.2 Install tool

One cross-screwdriver

### 2.2.3 Install process

(1) Open the DVR by screwdriver

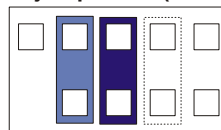
(2) **Set one as master and the other as slave if two HDDs are connected to one ATA interface!!!**

 **Attention:** Same HDD connected to parallel cable can not be set as master+master or slave+slave, must be master+slave!!!

□ HDD setup: Take the HDD of Maxtor (DiamondMax Plus 8 ATA/133 40GB) as example.

Read the jumper cutline in the rear of HDD

No jumper=DS(SLAVE)



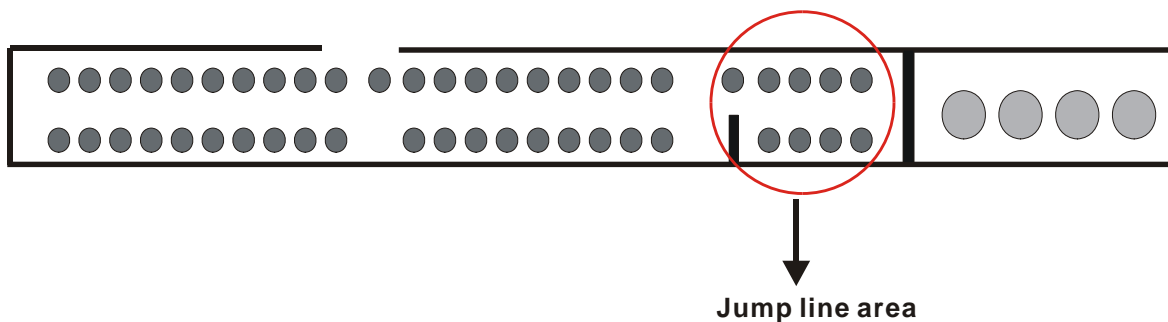
DS(MASTER)

CS Enable

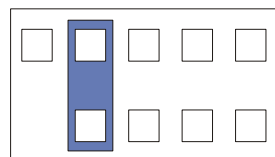
Cap limit

### Jump line area

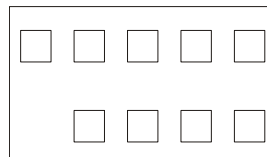
The picture blow is the connection section of the HDD.



Jump line according to the cutline above



**MASTER**



**SLAVE**

The sequence of read/write data from HDD

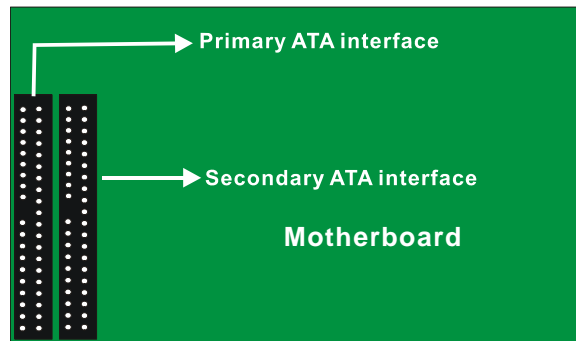
The ATA interface which is near the motherboard center is the secondary interface, the next ATA interface which is near the motherboard fringe is the primary interface. The sketch is in the following.

The HDD names that are shown in the DVR system are HDD A/B/C/D. The master HDD connected to

primary ATA interface is HDD A, the slave is HDD B. The master HDD connected to secondary ATA interface is HDD C, the slave is HDD D.

The record sequence: HDD A→HDD B→HDD C→HDD D

Overwrite sequence: The sequence is irrespective with HDD. The DVR over write HDD from the oldest record file when HDD is full.



### (3) Operation

① Put the HDD into the HDD fixation rack. **If the user wants to install more than two HDD, please install the HDD into the rack below first.**

Fix the HDD by two screws on both sides

③ Connect the HDD cable. There are three interfaces on cable and each of them can be connected with the master HDD or the slave HDD, motherboard. (There are 39 pins in two rows, 20 pins are in one row and

19 pins are in the other row). Make sure pins are plugged into interface exactly.

④ Connect the power supply to HDD

☐ Sketch map of installation

☐ Close the device cover and lock it by screws

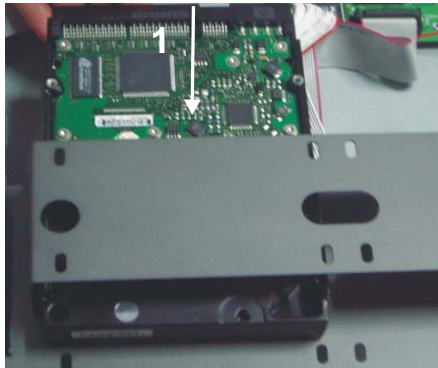
 **Attention:** 1. Please format the HDD before you using.

2. **If the user wants to connect the CD/DVD driver to the ATA interface, please choose the secondary interface, that is near the center of the motherboard. Furthermore, the CD/DVD driver must be set as master, and the HDD which is connected to same ATA interface with the CD-RW/DVD-RW must be set as slave.**

3. Any CD/DVD driver connected to DVR must be set as master, containing USB CD/DVD driver and IDE CD/DVD driver.

4. The CD/DVD driver connected to ATA interface can be viewed in the STATUS or STORAGE menu of DVR, the CD/DVD driver connected to USB interface can not be viewed in the menu of DVR.

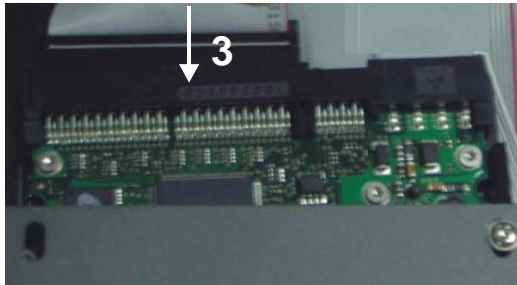
5. The CD/DVD driver is optional, depending on the user. If user connects CD/DVD driver to ATA interface, the max number of HDD that connects to ATA interface is three.



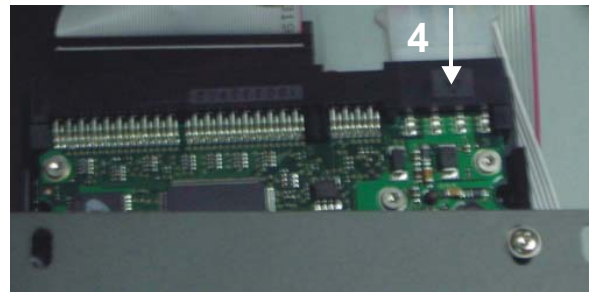
**First, put the HDD into the HDD fixation rack**



**Second, fix the HDD by two screws on both sides**




**Third, connect the HDD cable**



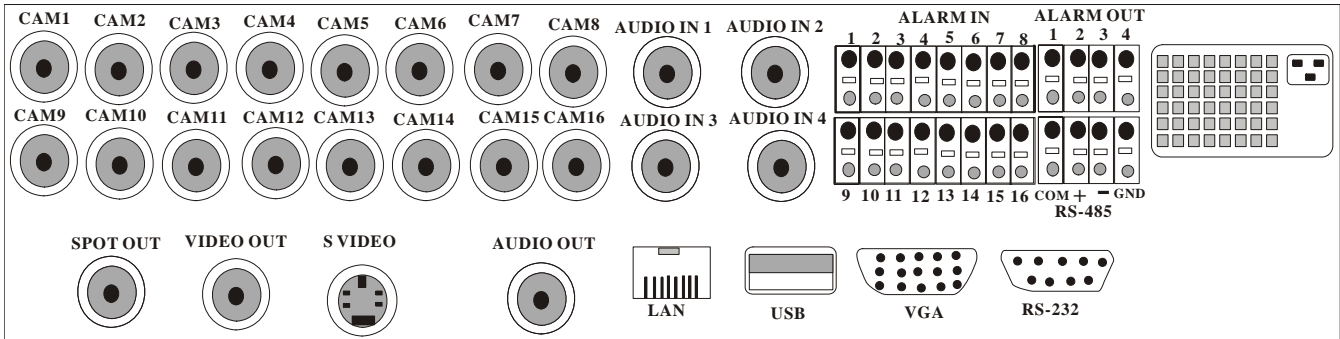
**Fourth, connect the power supply to HDD**

Sketch map of installation

2.3 Back panel and interface terminals





 **Attention:** The interfaces on the back panel please refer to the real object, there might be slightly difference from below sketch.

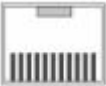
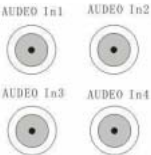
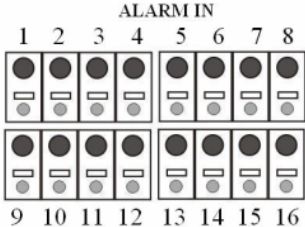
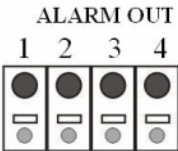
2.3.1 Back panel of 16-channel DVR

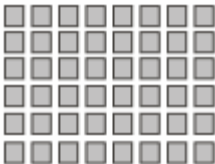



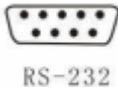
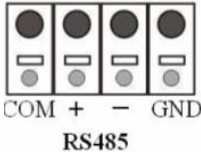


Back panel of 16-channel DVR		
Num	Icon	Description

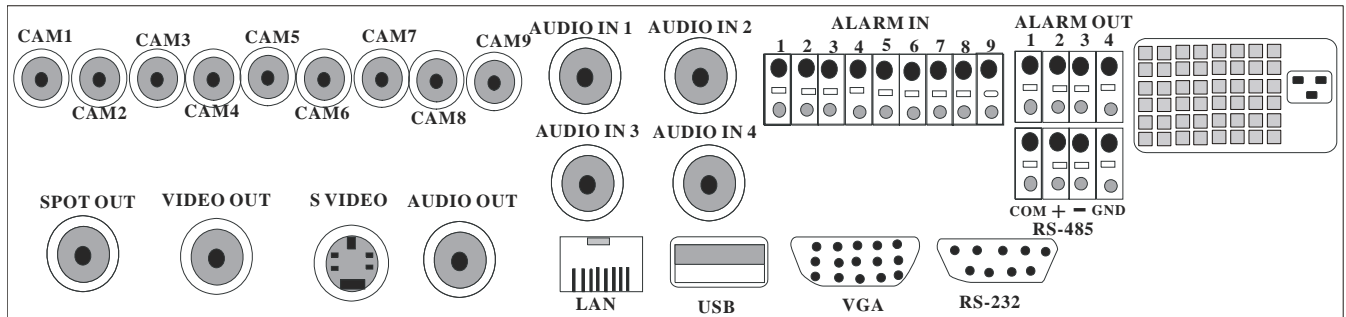


1	<div>CAM1 CAM2 CAM3 CAM4 CAM5 CAM6 CAM7 CAM8 CAM9 CAM10 CAM11 CAM12 CAM13 CAM14 CAM15 CAM16</div>	Video input 1-16
2	<div>SPOT OUT</div> 	Spot output
3	<div>VIDEO OUT</div> 	Video output
4	<div>S-VIDEO</div> 	S video output
5	<div>AUDIO OUT</div> 	Audio output

6	 LAN	LAN port
7		Audio in 1-4
8		Alarm input1-16
9		Alarm output

10		Fan vent
11		Power plug
12		USB port
13		VGA port
14		RS 232 port (Null)
15		RS485 port

### 2.3.2 Back panel of 9-channel DVR



**Back panel of 9-channel DVR**

The difference between 9-channel and 16-channel is as following:


- Video input: The video input channel of 9-channel is nine.

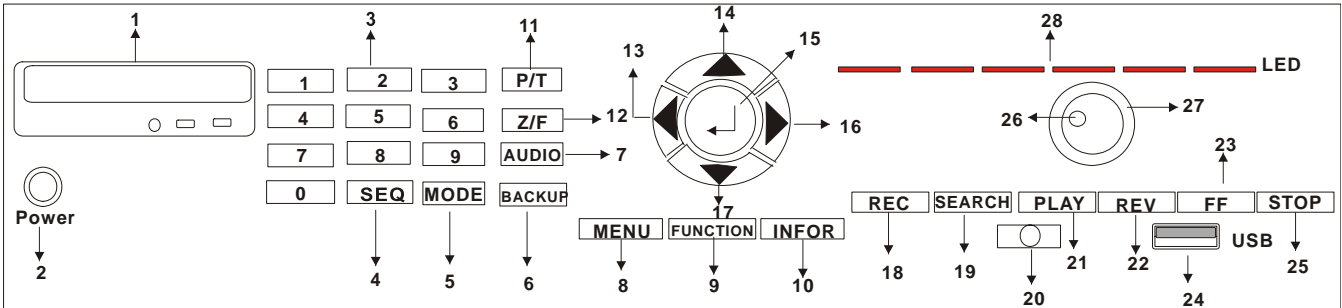








- Alarm input: The alarm input channel of 16-channel is sixteen.

























## 2.4 Front panel and interface terminals


 **Attention:** The buttons on the front panel please refer to the entity, there might be slightly difference from below sketch.



Number	Icon	Description	Number	Icon	Description
1		CD-RW/DVD-RW	2		Power button
3		Number button	4		Sequence button
5		Display mode shift button	6		Pan/Tilt control

7		Zoom/Focus control	8		Audio on/off button
9		Backup button	10		Menu button
11		Function button	12		Status button
13		Leftward	14		Upward
15		Enter button	16		Rightward
17		Downward	18		Record button
19		Shuttle: to control the DVR to play the record frame by frame.	20		Shuttle: to control the playback speed
21		Search button	22		Play button

23		Fast Reverse	24		Fast forward
25		Stop	26		Remote controller receiver
27	 USB	USB port	28		LED indicator lights, for power, HDD and backup, network status, playback status and record status respectively.

 **Attention:** □ The CD-RW/DVD-RW is optional, depending on the user. If the user connects CD-RW/DVD-RW to the ATA interface, the max number of HDD that connects to the ATA interface is three.

□ LED indicator lights:

The first light is on when the DVR is powered on;

The second light flickers when HDD is written or read;

The third light is on when backup in DVR;

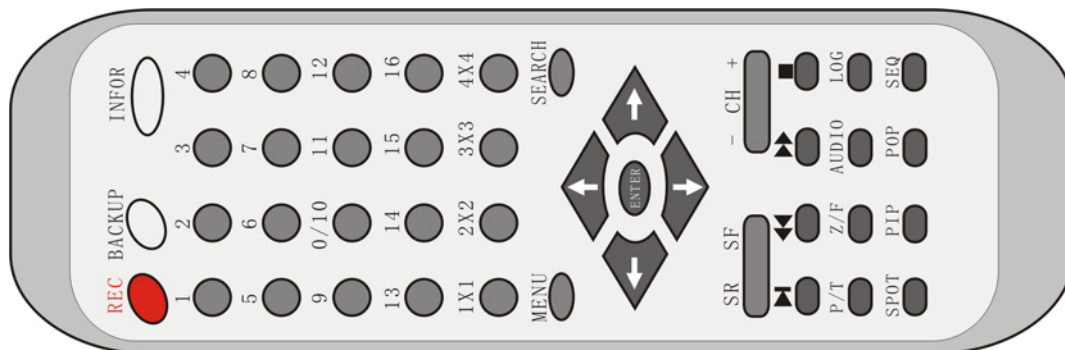
The fourth light is on when a computer connects with the DVR via network;

The fifth light is on when the DVR is playing back;


The sixth light is on when the DVR is recording.

## 2.5 Remote controller description



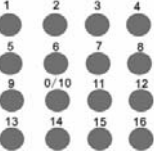





- Put the Battery into the Remote controller:
  - Open the battery cover of Remote controller
  - Put in two AAA batteries and make sure that they are not inserted upside down.
  - Put back the battery cover
- The entire view of remoter controller






















- The buttons description:

Number	Icon	Description
1		<b>Record button:</b> Press this button to start recording if the DVR does not record. Press this button to stop recording if the DVR is recording.




2		<b>Backup button:</b> Press this button, the DVR enters the backup menu (Fig3.3.7 USB backup). The details will be given in Chapter 3.3.3: BACKUP
3		<b>Information button:</b> Press this button to display status information of the DVR on the screen (Fig3.3.2 Status view).
4		<b>Number button:</b> These number buttons are used for selecting channels and other functions.
5		Full-Screen display mode. You can use CH+ or CH- button to switch the channel. This also can be done by pressing number buttons.
6		Four-Screen display mode.
7		Sixteen-Screen display mode
8		Nine-Screen display mode
9		<b>Menu button:</b> Press this button to enter the setup menu (Fig3.2.2 Setup menu), or return to previous menu level, or exit menu.

10		<b>Search button:</b> Press this button to enter to recording search page
11		<b>Upward</b>
12		<b>Leftward</b>
13		<b>Rightward</b>
14		<b>Downward</b>
15		SR is for Reverse when the DVR plays record while SF is for Forward
16		Change the channel one by one, “—” is used to change the channel from 16 to 1, and “+” is for changing the channel from 1 to 16
17		<b>Fast reverse</b> (There are seven options of speed to choose: 2X, 4X, 8X, 16X, 32X, 64X, 128X )
18		Play
19		<b>Fast forward</b> (There are seven options of speed to choose: 2X, 4X, 8X, 16X, 32X, 64X, 128X )
20		<b>Stop</b>
21		<b>Zoom/Focus control</b>

22		<b>Pan/Tilt control</b>
23		<b>Audio switch</b>
24		Log file button
25		Picture in picture: select the channel to display as small picture first, and then press PIP button to enter PIP mode, the background picture is the next channel. For example, If the user selects channel 10 first, and then press PIP button, the screen will display as the Fig2.1.1 PIP showing. If the display mode is PIP now, press the number button to select the small picture.
26		Spot button: This button enable or disable the video output to call monitor (spot monitor) in sequence.
27		POP: press this button first, and then press number button to select the channel of big picture. For example: press POP button first, and then press 5, the screen will display as the Fig2.1.2 POP showing.
28		Sequence button: press this button to make the DVR display channels in turn.

☐ If the Remote controller does not work, please check out the followings

- ☐ Whether the battery's anode and cathode are in the correct position or not
- ☐ The battery is ran out of
- ☐ Whether there is barrier between the Remote controller and DVR or not
- ☐ Whether there are some signals transmitted by other devices disturbing the Remote controller or not

 **Attention:** If the possibilities above are excluded, please contact with vendor to change the remote controller

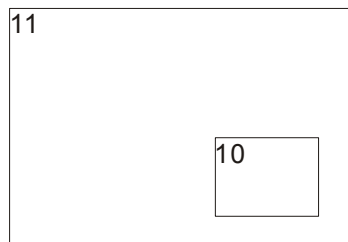


Fig2.1.1 PIP

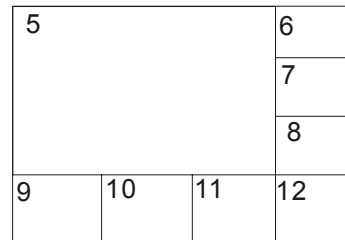
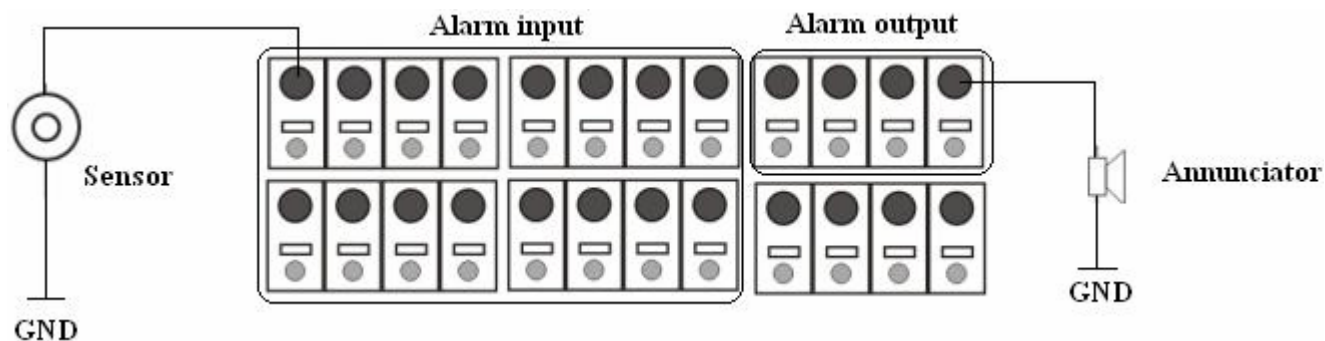


Fig2.1.2 POP

## 2.6 Alarm cable connection

Example of alarm output connection:



**Attention:** The alarm output is TTL high level control. The connection method is described in details in the picture above.

This DVR can carry sixteen sensor alarm input equipments and four alarm output equipments.

There are two types of alarm input:

- ☐ Voltage input (5V and 0V)

The low electrical level alarm of DVR is required if the usual voltage output is at high electrical level (5V) and alarm is set at low electrical level (0V).

The high electrical level alarm of DVR is required if the usual voltage output is at low electrical level (0V) and alarm is set at high electrical level (5V).

If the sensor outputs low voltage (0V) normally, and outputs high voltage when triggered (5V), then user must set DVR as high voltage alarm.


□ Open/Close input

N.O: Normal open. It will be closed when triggered. DVR must be set as low voltage alarm;

N.C: Normal close. It will be opened when triggered. DVR must be set as high voltage alarm.

## Basic operation guide

### 3.1 How to start the DVR

 **Attention:** Before power on the machine, please make sure the power input (110V/220V) of DVR is eligible for local power supply, if not, please move the red flipper to the correct input.

If the power indicator light is off, please do as the following:

- ☐ If the DVR is not connected to the AC source, please connect it. Afterwards the DVR will be powered immediately. However, if the problem is remaining, please do as the next step.

- ☐ Switch up the power supply in the back panel, the DVR will start.

The power indicator light is on DVR is powered on, and the word — “Loading.....” appears on the screen. That indicates the DVR is initializing and will enter the live preview soon.

A password is required to access to the menu, you can not enter the next level menu until you type in correct password. In order to avoid password being spied, the password you input is displayed as “\*” while you are inputting the password.

Only administrator, access the menu with administrator password can setup and modify the configuration, change administrator password and normal user password.

Normal user can view the live image and playback record by inputting normal user password when

machine is initialised. (The detail of admin password and user password are described in chapter 3.2.1 SETUP-SYSTEM).

Input default password-"0000" to visit the setup menu if you start the DVR, assuming that you have not changed the password or you have recovered the default setting.

The date, time and channel name are displayed on the screen.

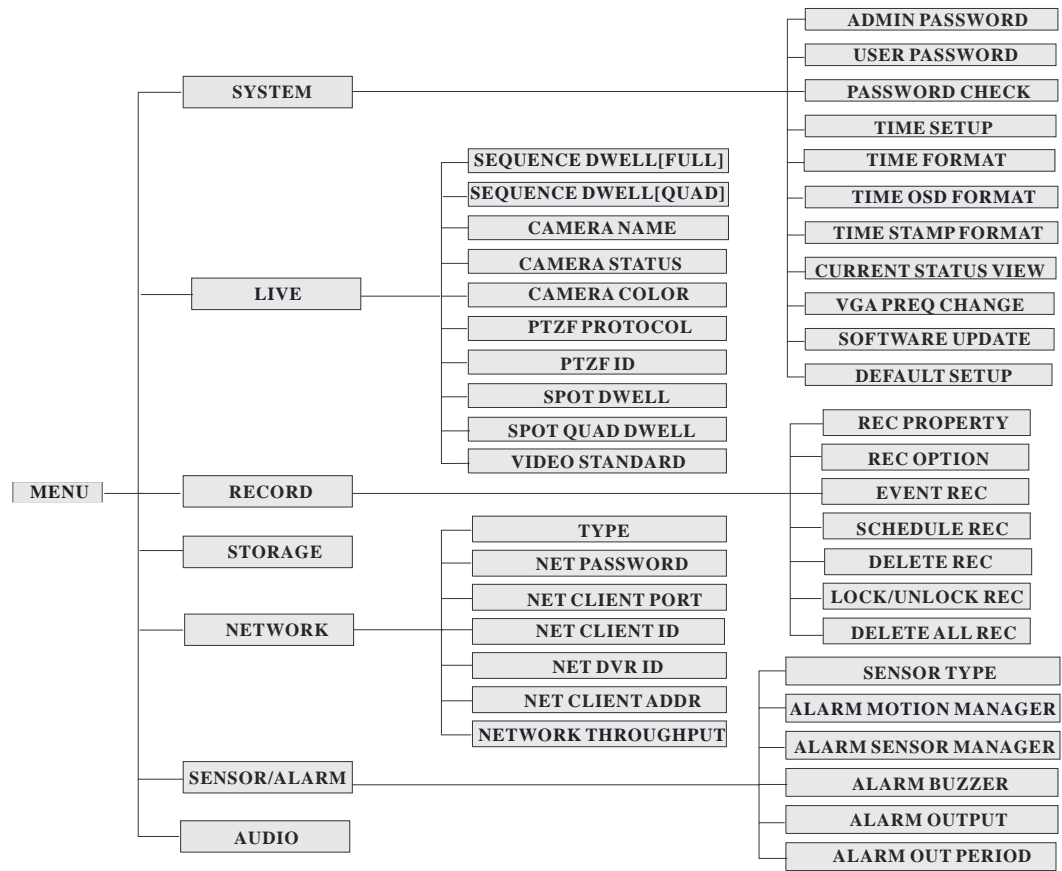
Symbol	Meaning
LIVE	Live state
REC	Record(Manual or continuous)
R A	Alarm record
R M	Motion record
HDD	The use ratio of HDD
V-LOSS	Video loss
USB	USB equipment connected

Press the number key to enter the single-screen mode. If you want to view the image from channel 1 to channel 16, please press the corresponding number key. For example: To see the picture in channel 3, press the key 3; to see the picture in channel 13, press the key 10+ first and press the key 3 second.

### 3.2 Login and setup the system

The menu structure chart:





There are two users in the origin DVR system. One is Admin which has highest priority to set system's configuration and whose password is "0000", the other is common user which is just allowed to see the live play and the playback picture. And it does not have the right to change its password, which is done by Admin users.

			LIVE
	[SETUP]		
	*SYSTEM		
	*LIVE		
	*REC		
	*STORAGE		
	*NETWORK		
	*SENSOR/ALARM		
	*AUDIO		
	2005 / 06 / 20	12 : 30 : 05	

Fig3.2.1 Setup menu

	[SETUP-SYSTEM]		LIVE
	*<ADMIN PASSWORD>		
	*<USER PASSWORD>		
	*<PASSWORD CHECK>		
	*<TIME SETUP>		
	*<TIME FORMAT>		
	*<TIME OSD FORMAT>		
	*<TIME STAMPT FORMAT>		
	*<CURRENT STATUS VIEW>		
	*<VGA PREQ CHANGE>		
	*<SOFTUPDATE>		
	*<DEFAULT SETUP>		
	2005 / 06 / 20	12 : 30 : 05	

Fig3.2.2 System setup

Operation:

Press the Menu key and enter the ADMIN password, and then you will see the setup menu (Fig3.2.1 Setup menu). Use the "Up" "Down" "Right" and "Left" to shift cursor, the item selected will be displayed in yellow.

Press the “Enter” key to enter the sub-menu and press the “Menu” key to get back to the main menu.

3.2.1 SETUP-SYSTEM

The menu is as above: (Fig3.2.2 System setup)

□ **ADMIN PASSWORD:** Administrator password is initialized as “0000”, only the administrator has the right to change it which is comprised of four numbers between 0 and 9 (Fig3.2.3 Setup admin password).

			LIVE
[SETUP-SYSTEM-ADMIN] ENTER NEW ADMIN PASSWORD			
: _ _ _ _			
2005 / 06 / 20 12 : 30 : 05			

Fig3.2.3 Setup admin password

			LIVE
[SETUP-CHECK-PASSWORD] ADMIN: [ON] USER: [OFF]			
2005 / 06 / 20 12 : 30 : 05			

Fig3.2.4 Password check

□ **USER PASSWORD:** Common user password is initialized as “0000” as well. However, only the

administrator is authorized to change it which is comprised of four numbers between 0 and 9.

□ **PASSWORD CHECK:** If you choose “ON”, users have to input the password before entering menu. You can setup the DVR's configuration if you enter the administrator password. And the common user password just allows you to the check the live image or saved record; if you choose “OFF”, there is no limitation on configuration. Anyone can enter the system directly without password. (Fig3.2.4 Password check)

□ **TIME SETUP:** Use the “Up” “Down” “Left” and “Right” buttons to move the cursor and use the number key in panel or remote controller to modify the value. If the DVR is recording or playing back the visit to this menu is not allowed unless the recording or playing back is stopped. (Fig3.2.5 Time setup)

□ **TIME FORMAT:** YY/MM/DD: Asian format, Year/Month/Day; DD/MM/YY: European format, Day/Month/Year; MM/DD/YY: American format, Month/Day/Year. (Fig3.2.6 Time format)

□ **TIME OSD FORMAT:** Time format of live-image.

**TOP-WHITE:** Time is displayed on top in white

**TOP-BLACK:** Time is displayed on top in black

**BOTTOM-WHITE:** Time is displayed at the bottom in white

**BOTTOM-BLACK:** Time is displayed at the bottom in black

**OFF:** There is no time displayed in the live-image.

□ **TIME STAMP FORMAT:** Time format of plays back mode.

**TOP-WHITE:** Time is displayed on top in white

**TOP-BLACK:** Time is displayed on top in black

**BOTTOM-WHITE:** Time is displayed at the bottom in white

**BOTTOM-BLACK:** Time is displayed at the bottom in black  
**OFF:** There is no time displayed in the play back mode.

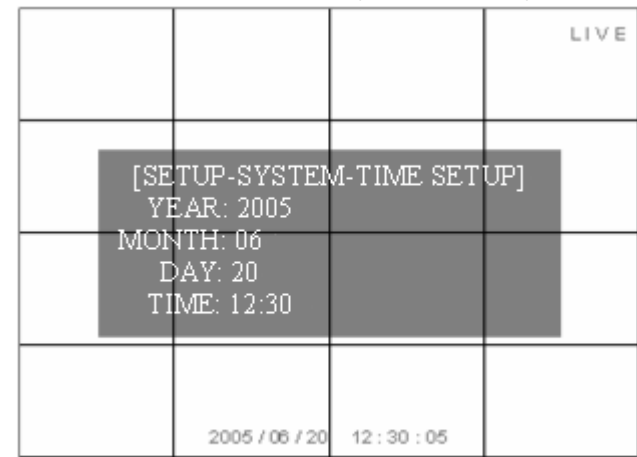


Fig3.2.5 Time setup↵

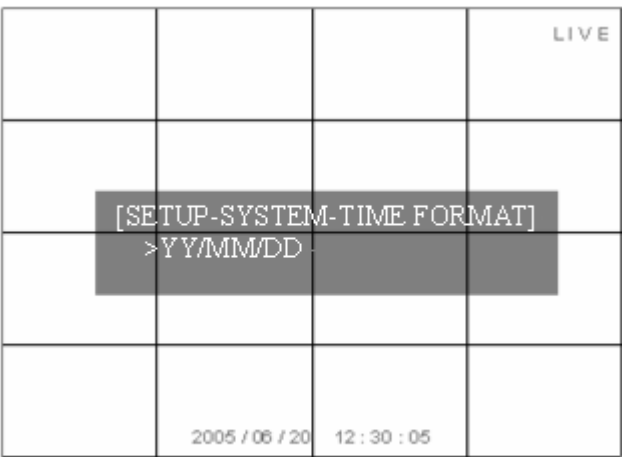


Fig3.2.6 Time format

- ❑ **CURRENT STATUS VIEW:**  
 Choose “ON”, there will be some information appearing on the screen. For example, HDD quantity, used ratio of HDD, record mode including manual/alarm/motion etc...  
 Choose “OFF”, there is no information on the screen.
- ❑ **VGA PREQ CHANGE:** (Fig3.2.7 VGA frequency change)  
 There are two options to choose: 50Hz and 60Hz. Please choose a suitable one for VGA monitor.

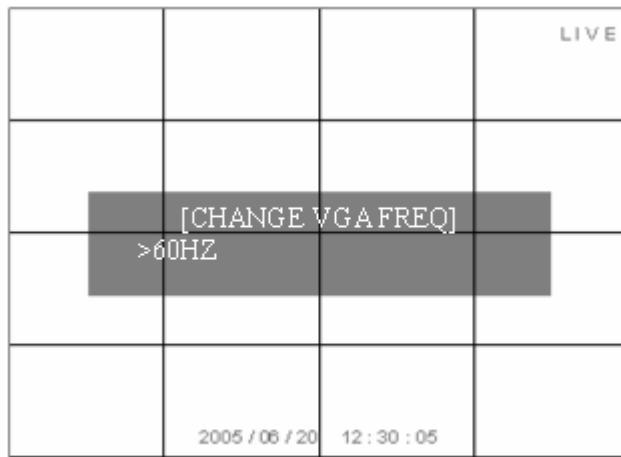


Fig3.2.7 VGA frequency change

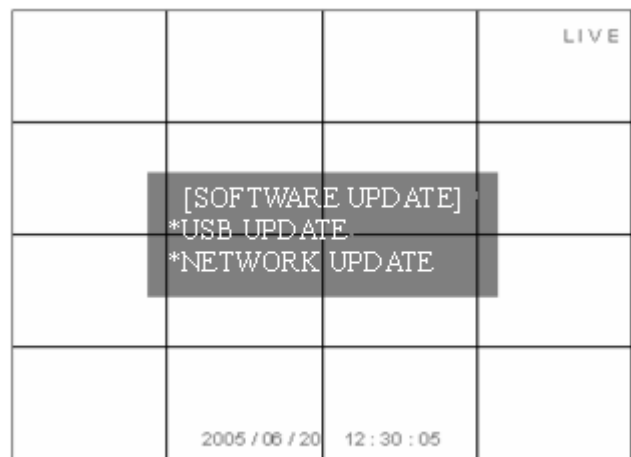
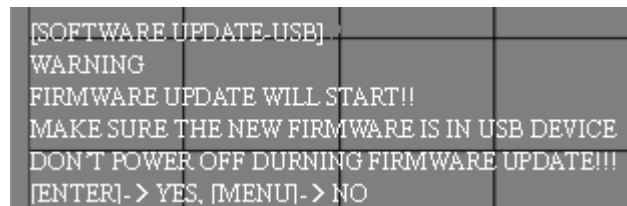


Fig3.2.8 Software update

- **SOFTWARE UPDATE:** (Fig3.2.8 Software update)
- **USB UPDATE:** Update firmware from USB flash memory
- Press USB UPDATE and below screen will pop up



- ☐ Update firmware:
- ☐ Make sure the updating firmware is in the USB disk
- ☐ Do not power off the DVR during updating;
- ☐ Press “ENTER” button to start updating.
- ☐ Then the system will check the updating firmware

FIND USB MEMORY: OK	
FIND SW: OK	
SW NAME:	
flash-m1_tvt_16-060728-12.tar	
EXTRACT SW: WAIT	

- ☐ When the updating firmware is found O.K., the system starts to update.

SOFTWARE UPDATE	
ERASE: DONE	
BLANK CHECK: DONE	
UPDATE: 25%	
PGM CHECK:	

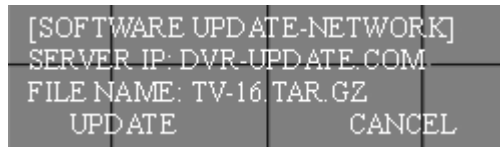
- ☐ Update process:
- ☐ Erase the former file;
- ☐ Check the space for update;
- ☐ When the space is ready, the software update starts, the percent of update is in the right. It takes

about two minutes to update.

☐ When the erase, blank check and update are done, system will check the new program which is written just now.

☐ After the program check is done, the system will restart. So far, USB update is over.

☐ **NETWORK UPDATE:** The update information is in network, please choose this option



Server IP: The IP address of the network where the firmware is in.

File name: The file name of the firmware.

After filled in the two options above, move cursor to "UPDATE", press "ENTER" button to begin update from network. It is the same with USB update that the DVR will restart when the software update completed.

 **Attention:** Please make sure the IP address and the file name are correct.

☐ **DEFAULT SETUP:** recover the origin configuration setup.

### 3.2.2 SETUP-LIVE (Fig3.2.9 Setup live)

☐ **SEQUENCE DWELL (FULL):** Setup the interval period of single channel switching, there are 9 options for users, from 0 second to 9 seconds.

☐ **SEQUENCE DWELL (QUAD):** Setup the interval period of four-channel switching, there are 9 options for users, from 0 second to 9 seconds.



□ **CAMERA NAME:** Name of the channel. It is comprised of the English letters from “a” to “z” or the numbers from “0” to “9”.

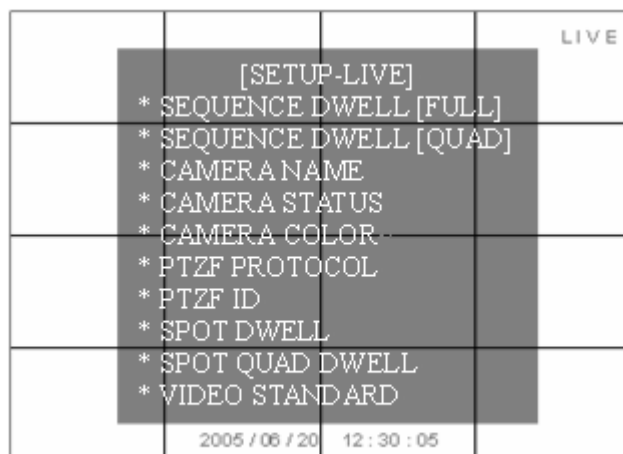


Fig3.2.9 Setup live

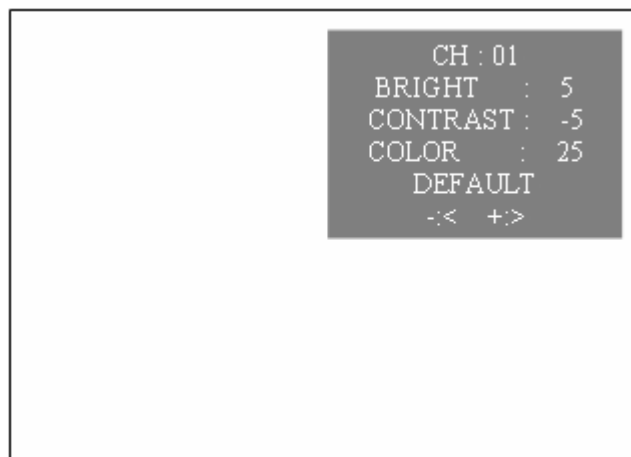


Fig3.2.10 Camera color adjust

□ **CAMERA STATUS:** If you choose “SHOW”, this image will be displayed on the screen. If you choose “HIDE”, the image will not only be displayed on the screen in live status but also in playback status. When the user plays back this record, setup this option as “SHOW”, the image hided in live status will be displayed.

□ **CAMERA COLOR:** Modify channel color, contrast and bright. (Fig3.2.10 Camera color adjust)

□ **PTZF PROTOCOL:** Choose the PTZF control protocol for each channel (Fig3.2.11 PTZF protocol). There

are seventeen options for users: PELCO\_D-2400, PELCO\_D-9600, PELCO\_P-4800, PELCO\_P-9600, SCC641-9600, SCC641-19200, SK2161-9600, CNB\_102-9600, ADTECH-4800, 15-CD51M-2400, Chubb iSD-9600, COP1-2400, COP1-4800, COP1-9600, COP1-19200, COP2-9600, 15-CD51M-2400, DSC230-9600

			LIVE
[SETUP-LIVE-PTZF PROTOCOL]			
01>PELCO_D-2400	09>PELCO_D-2400		
02>PELCO_D-2400	10>PELCO_D-2400		
03>PELCO_D-2400	11>PELCO_D-2400		
04>PELCO_D-2400	12>PELCO_D-2400		
05>PELCO_D-2400	13>PELCO_D-2400		
06>PELCO_D-2400	14>PELCO_D-2400		
07>PELCO_D-2400	15>PELCO_D-2400		
08>PELCO_D-2400	16>PELCO_D-2400		
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Fig3.2.11 PTZF protocol

			LIVE
[SETUP-LIVE-SPOT DWELL]			
	NO	SEC	
CAM 01	2	CAM 09	2
CAM 02	2	CAM 10	2
CAM 03	2	CAM 11	2
CAM 04	2	CAM 12	2
CAM 05	2	CAM 13	2
CAM 06	2	CAM 14	2
CAM 07	2	CAM 15	2
CAM 08	2	CAM 16	2
	2005 / 06 / 20	12 : 30 : 05	

Fig3.2.12 Spot dwell

- **PTZF ID:** Setup the PTZF address, you can choose from “000” to “255”.
- **SPOT DWELL:** 16 channel pictures circulate from 1 to 16. Press “Enter” button to get access to the configuration setup menu to modify the interval time between two channels switch. The user can use the number buttons to choose the options—from“0” to “9” seconds. (Fig3.2.12 Spot dwell)

□ **SPOT QUAD DWELL:** Channel-switching circulates from quad 1 to quad 4 (The order is: channel 1,2,3,4→channel 5,6,7,8 →channel 9,10,11,12→channel 13,14,15,16→channel 1,2,3,4→...), press “Enter” button to get access to the configuration setup menu to modify the interval time between two sets of pictures switching. The user can use the number buttons to choose the options—from“0” to “9” seconds.

□ **VIDEO STANDARD:** Setup the video style.

There are four options to choose: AUTO-DETECT, SWITCH, NTSC, and PAL. The DVR can detect the video automatically if you set this option as AUTO-DETECT, you can also set the video standard manually.

**3.2.3 SETUP-REC:** Setup the parameter of record (Fig3.2.13 Setup record)

□ **REC-PROPERTY:** It contains REC RESOLUTION, QUALITY and RATE (Fig3.2.14 Setup record property).

□ **REC RESOLUTION:** Higher the resolution is, clearer the picture is. The resolution from low to high is: PAL:360\*288 (CIF), (720\*288) HalfD1, (720\*576) D1; NTSC: (360\*240) CIF, (720\*240) HalfD1, (720\*480) D1.

□ **QUALITY:** There will be four options to choose: low, normal, high and best. Higher the quality value is, better the picture is.

□ **RATE:** The frame rate. If you choose 8, the picture recording rate is 8 frames per second.


The maximum of **RATE** is different when the **REC RESOLUTION** is different. For example:

The record resolution is 720\*576(PAL)/720\*480(NTSC), there are five frame rates to choose: 0, 1, 2, the maximum is 2.

The record resolution is 720\*288(PAL)/720\*240(NTSC), there are six frame rates to choose: 0, 1, 2, 4, the

maximum is 4.

The record resolution is 360\*288(PAL)/360\*240(NTSC), there are seven frame rates to choose: 0, 1, 2, 4, 8, the maximum is 8.

 **Attention:** These three factors above decide the quality of picture and the use ratio of HDD.

			LIVE
	[SETUP-REC]		
	* REC PROPERTY		
	* REC OPTION		
	* EVENT REC		
	* SCHEDULE REC		
	* DELETE REC		
	* LOCK/UNLOCK REC		
	* DELETE ALL REC		
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Fig3.2.13 Setup record

			LIVE
	[SETUP-REC-REC PROPERTY]		
	REC RESOLUTION: <720*576>		
	CH QUALITY RATE		CH QUALITY RATE
	01 >BEST >2	09 >BEST >2	
	02 >BEST >2	10 >BEST >2	
	03 >BEST >2	12 >BEST >2	
	05 >BEST >2	13 >BEST >2	
	06 >BEST >2	14 >BEST >2	
	07 >BEST >2	15 >BEST >2	
	08 >BEST >2	16 >BEST >2	
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Fig3.2.14 Setup record property

☐ **SETUP- REC OPTIONS:** Setup of record option (Fig3.2.15 Setup record option)

☐ **RECORD CONTINUOUS:** If you choose “ON”, DVR records continuously in HDD recycle mode. If you choose “OFF”, this function is disabled.

 **Attention:** In Continuous mode, Manual and Alarm record are activated at the same time, the DVR

records continuously. If the alarm record occurred, the DVR remains recording continuously and you can find the alarm event through “event search” or “file search”.

□ **PLAY DEINTERLACE:** Interlace scan and play. If you choose “ON”, the DVR will play back after an internal of line. If you choose the “OFF”, this function is disabled.

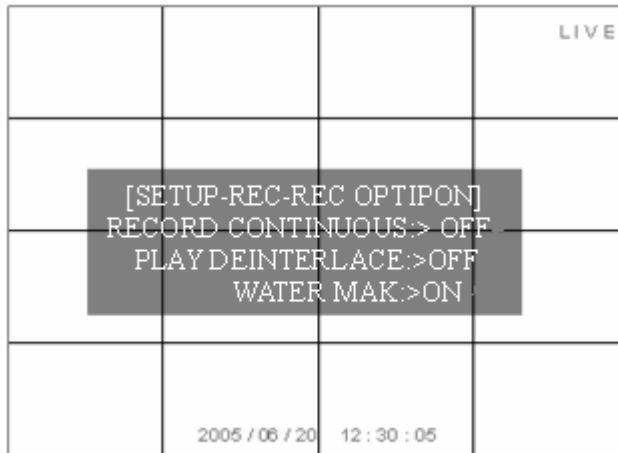


Fig3.2.15 Setup record option

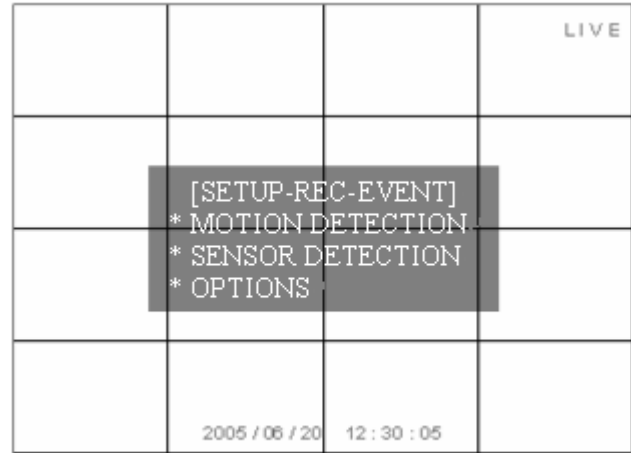



Fig3.2.16 Setup event record

 **Attention:** This function is more useful in VGA output mode.

□ **WATER MARK:** If you choose “ON”, this function is active. Water mark can protect recording files from being modified, as the modification can be technically traced by checking watermark. The system will add the invisible code to the record when the “WATER MARK” is on; the particular introduction is in Chapter 3.3.3

Backup.

If you choose “OFF”, this function is disabled.

□ **SETUP-REC-EVENT**: Setup of the event record (Fig3.2.16 Setup event record)

□ **MOTION DETECTION** (Fig3.2.17 Setup motion detection):

□ **AREA**: This is the detection area setup

There are three options to choose: ALL, PART, OFF

□ **ALL**: All area will be detected.

□ **PART**: The part selected will be detected. Use the “Up” “Down” “Left” and “Right” to choose the part needed to be detected and use enter key to select/cancel the part. The part selected will be in blue and gray part will not be detected.

□ **OFF**: This function will be disabled.

□ **SEN**: This is the sensitivity of the motion detection. You can use remote controller or the number button on front panel to set any value of sensitivity from 0 to 9. The value is bigger, the sensitivity is higher.

						LIVE		
[SETUP-REC-EVENT REC(M/D)]								
REC RESOLUTION: <720*576>								
CH	SEN	AREA	CH	SEN	AREA			
01	0	>OFF	09	0	> OFF			
02	0	> OFF	10	0	>PART			
03	0	>OFF	11	0	>ALL			
04	0	>OFF	12	0	>ALL			
05	0	>OFF	13	0	> OFF			
06	0	> OFF	14	0	> OFF			
07	0	> OFF	15	0	> OFF			
08	0	> OFF	16	0	> OFF			
2005 / 06 / 20			12 : 30 : 05					

Fig3.2.17 Setup motion detection

[SETUP-REC-EVENT(S/D)]															
CH		1													
		1	2	3	4	5	6	7	8	9	0	1	2	3	4
S 01	V	■	■	■	■	■	■	■	■	■	■	■	■	■	■
S 02	■	■	V	■	■	■	■	■	■	■	■	■	■	■	■
S 03	■	V	■	■	■	■	■	■	■	■	■	■	■	■	■
S 04	V	■	■	■	■	■	■	■	■	■	■	■	■	■	■
S 05	V	■	■	■	■	■	■	■	■	■	■	■	■	■	■
S 06	V	■	■	■	■	■	■	■	■	■	■	■	■	■	■
S 07	V	■	■	■	■	■	■	■	■	■	■	■	■	■	■
S 08	V	■	■	■	■	■	■	■	■	■	■	■	■	■	■
S 09	V	■	■	■	■	■	■	■	■	■	■	■	■	■	■
S 10	V	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Fig3.2.18 Setup sensor detection

□ **SENSOR DETECTION:** Each channel matches a relevant Sensor, for example, Channel 2 is linked to Sensor 4, if the Sensor 4 gives alarm, the alarm information will be given on the picture by channel 2 (Fig3.2.18 Setup sensor detection), the “□” means that the channel can not be detected, “V” means that the channel can be.

□ **OPTIONS:** (Fig3.2.19 Setup record time)

□ **POST-RECORD TIME:** The length of the record time after alarm triggered. You have five options to choose: 10 seconds, 30 seconds, 1 minute, 5 minutes and 10 minutes.

□ **PRE-RECORD TIME:** The length of the record time before alarm triggered. You have five options to

choose: 2 seconds, 4 seconds, 6 seconds, 8 seconds and 10 seconds.

□ **POP-UP SCREEN:** If you choose “ON”, the image will be in full screen when the DVR gives alarm. If you choose “OFF”, this function is disabled.

			LIVE
[SETUP-REC-EVENT-OPTIONS]			
POST-RECORD TIME :> 10SEC			
PRE-RECORD TIME :> 3SEC			
POP UP SCREEN :> ON			
2005 / 06 / 20		12 : 30 : 05	

Fig3.2.19 Setup record time

				LIVE
[SETUP-REC-SCHEDULE REC]				
	CH NO	CH NO		
	CH 01	CH 09		
	CH 02	CH 10		
	CH 03	CH 11		
	CH 04	CH 12		
	CH 05	CH 13		
	CH 06	CH 14		
	CH 07	CH 15		
	CH 08	CH 16		
ALL CHANNEL				
	2005 / 06 / 20	12 : 30 : 05		

Fig3.2.20 Setup schedule record

□ **SETUP-SCHEDULE-REC:** Setup of schedule record (Fig3.2.20 Setup schedule record)

Press enter key to visit the menu (Fig3.2.21 Setup schedule record time). “O” means unselected, “V” means selected. Use enter key to switch the status and use menu key to get back to upper level menu.

SU: Sunday    MO: Monday    TU: Tuesday    WE: Wednesday    TH: Thursday    FR: Friday  
SA: Saturday



[illegible]

			LIVE
DELETE FILE LIST			
2646	20060517_113230	33S D U	
2647	20060517_113226	63S D U	
2648	20060517_113225	60S D U	
2649	20060517_113223	90S D U	
2650	20060517_113218	76S D U	
2651	20060517_113217	24S D U	
2652	20060517_113213	88S D U	
PAGE 1/177			
PAGE UP:< PAGE DOWN:>			
LAST:《		FIRST:》	
2005 / 06 / 20		12 : 30 : 05	

1 2  
“0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3” means: “0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23”— the 24 hours in a day.

The shortest schedule record interval is one hour. For example, if the first “2” is chosen at abscissa axis, “MO” is chosen at ordinate axis, which means the DVR starts to record at 2:00 AM on Monday and till 3:00 AM; the record will last for one hour. The record file in HDD is divided into many segments, whose length is ten minutes. There are six record segments in one hour.

☐ **DELETE REC:** Delete the selected recording list (Fig3.2.22 Delete file)

Press enter key to visit the menu, information is given below (Fig3.2.23 Information of deletion)

			LIVE
[WARNING!!!] DELETE FILE 2646 20060517_113230 33SD U			
ARE YOU SURE? [ENTER]→ YES [MENU]→ NO			
	2005 / 06 / 20	12 : 30 : 05	

			LIVE
LOCK UNLOCK FILE LIST			
2646	20060517_113230	33SD U	
2647	20060517_113226	63SD U	
2648	20060517_113225	60SD U	
2649	20060517_113223	90SD L	
2650	20060517_113218	76SD U	
2651	20060517_113217	24SD U	
2652	20060517_113213	88SD L	
PAGE 1/177			
PAGE UP: < PAGE DOWN: >			
LAST: 《 FIRST: 》			
	2005 / 06 / 20	12 : 30 : 05	

Fig3.2.23 Information of deletion

Fig3.2.24 Lock/Unlock file

“DELETE FILE 0171 200 60407\_170000 15AS D U

ARE YOU SURE?

[ENTER]→ YES [MENU]→ NO”

Press enter key to delete this record or press menu key to quit deleting

“0171 200 60407\_170000” is a record name.

“U” means unlock, if “U” is displaced by “L”, this record is locked and can not be removed. Please refer to Appendix C for the abbreviations explain.

□ **LOCK/UNLOCK:** Lock/unlock the record. Use enter key to change the status (Fig3.2.24 Lock/Unlock file).

If the file is locked, then the record can not be deleted or overwritten even though the HDD is full.

□ **DELETE ALL:**

If the DVR is recording, the system will remind

“DELETE ALL

STOP RECORDING AND TRY”

Once the recording is stopped, the system will send reminder as: (Fig3.2.25 Delete all the file)

“ALL RECORDED FILES WILL BE DELETES

ARE YOU SURE?

[ENTER]→ YES [MENU]→ NO”

Press enter key to delete all the record or press menu key to cancel this operation.

### 3.2.4 SETUP-STORAGE (Fig3.2.26 Setup storage)

**OVER WRITE:** If you choose **YES**, the DVR will have continuous record and over write from the oldest file when HDD is full. The DVR overwrites file from the oldest file. If you choose **NO**, the DVR will stop recording when the HDD is full.

**FORMAT:** Use the “Up” and “Down” key to choose HDD that you want to format. A hint pops up after pressing “enter”.

“DISK HDD-\*


MOUNTED

ARE YOU SURE?

[ENTER]→ YES [MENU]→ NO”

(\* represents A, B, C, D)

Press enter key to format the HDD, Press menu key to cancel this operation.

 **Attention:** The format time depends on the HDD capability, bigger HDD takes longer time. Normally, a 40G HDD takes about eighty seconds. If CD/DVD driver connected to ATA interface, there will be three HDDs and one CD-ROM displayed.

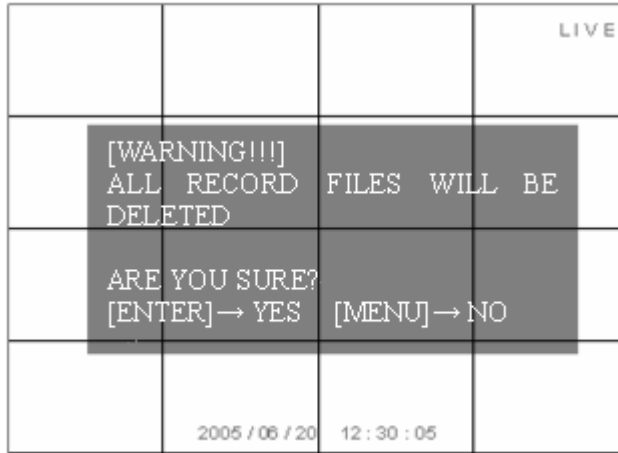


Fig3.2.25 Delete all the file

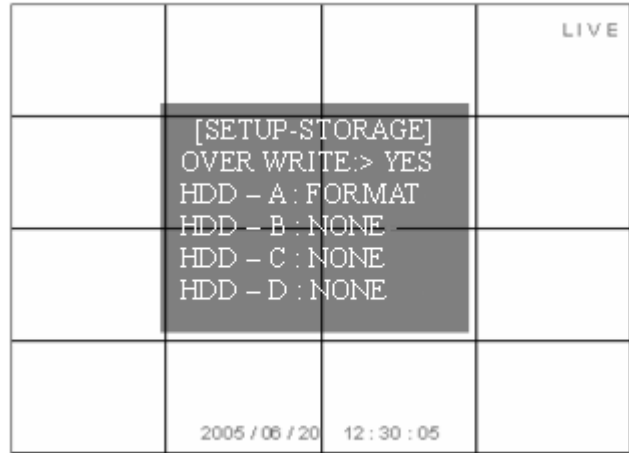


Fig3.2.26 Setup storage

### 3.2.5 SETUP-NETWORK (Fig3.2.27 Setup network)

□ TYPE:

□ **STATIC:** Static IP address. Push “Up” “Down” “left” “Right” to move the cursor among the digits and push ADD or DEC key to modify the IP address. (Fig3.2.28 Setup static IP).

□ **DYNAMIC:** Dynamic IP address. Press enter key to visit the menu, the system will display “Please wait” for a while. Then, the IP address which is assigned by network will be displayed on the screen. If the DVR failed to connect the network, it will display the information below: (Fig3.2.29 DHCP setting failing)

DHCP SETTING FAIL  
CHECK YOUR NETWORK

			LIVE
	[SETUP-NETWORK]		
	* TYPE :> DYNAMIC		
	* DDNS		
	* NET PASSWORD		
	* NET CLIENT PORT		
	* NET CLIENT ID		
	* NET DVR ID		
	* NET CLIENT ADDR		
	* NETWORK THROUGHPUT		
	2005 / 06 / 20	12 : 30 : 05	

Fig3.2.27 Setup network

			LIVE
	[SETUP-NETWORK-STATIC IP]		
	IP ADDRESS		
	192.168.0.122		
	GATEWAY		
	192.168.0.001		
	SUB-NETMASK		
	255.255.255.000		
	2005 / 06 / 20	12 : 30 : 05	

Fig3.2.28 Setup static IP

👉 **Attention:** If the network DVR is connected to one of the following items, we recommend use **Dynamic**.

- The local area network has DHCP server
- The DVR can get IP address automatically from internet
- **PPPOE**: Connect to network by ADSL modem. “Name” is your ADSL account and “Auth” is your password.

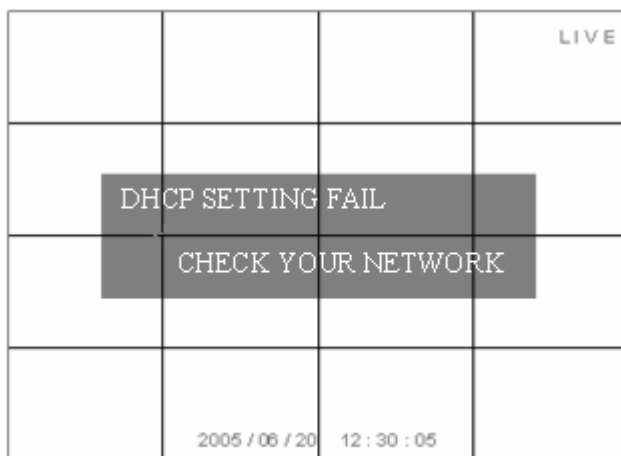


Fig3.2.29 DHCP setting failing

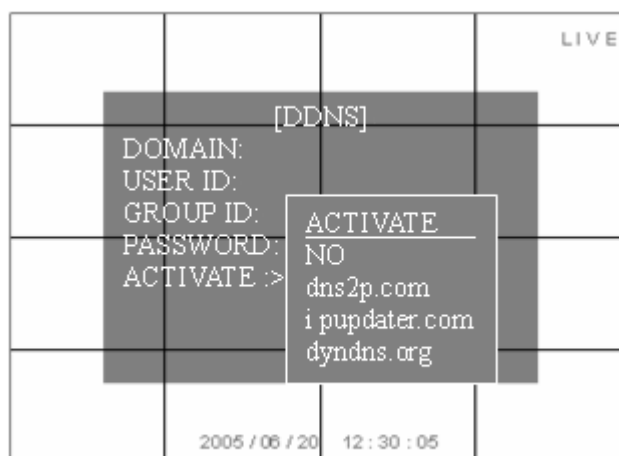
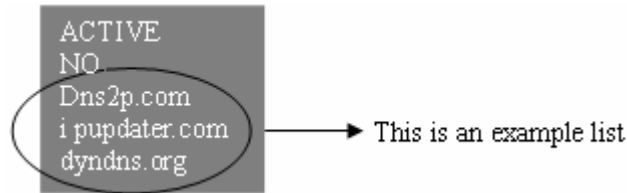



Fig3.2.30 DDNS

- **DDNS** (Fig 3.2.30 DDNS)



**Dynamic domain service.** To use this function, user need to get a domain from the ISP, whose protocol is packed in this DVR, as above list .Please note that the actual ISP list may be different from each Vendor, please consult your local vendor on how to get the domain if different from below example. Take the “dns2p.com” as example to introduce:

- ☐ Register
- ☐ Register in the web.

Fill out the IE address column with [www.dns2p.com](http://www.dns2p.com) and Click  to enter the website. Click “New user” in the right of home page to register. For example: User ID is “abc”, password is “123456”.

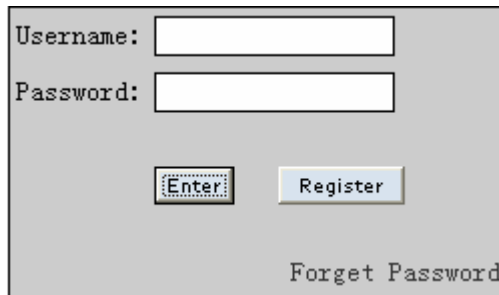
## Register

User ID	<input type="text" value="abc"/>	*
Resolve Type	<input type="text" value="mongline"/>	<input type="button" value="v"/> *
Password	<input type="password" value="....."/>	*
Confirm Password	<input type="password" value="....."/>	*
Name	<input type="text"/>	
City	<input type="text"/>	*
Country	<input type="text" value="Philippines"/>	<input type="button" value="v"/>
Company Name	<input type="text"/>	*
E-mail	<input type="text"/>	*
Address	<input type="text"/>	
Code	<input type="text"/>	
Tel 1	<input type="text"/>	*
Tel 2	<input type="text"/>	
<input type="button" value="register"/> <input type="button" value="reset"/>		

☐ Login

Return to home page after registering successfully. Click “Account manager” in the right of home page to login.





Username:

Password:

[Forget Password](#)

Username is User ID set before, which is “abc”.

Password is set before, which is “123456”.

Click “Enter” button after filling out.

#### ☐ Domain setup

Click the “Domain management” in the left to setup the domain.



Domain:  . dns2p. com

Enter the domain in the blank and click “submit” button, the system will pop up a dialogue to show that add domain successful. For example, set “dvr” as the domain.



□ The length of probationary period is one month. If user wants to use it over one month, please click the “Buy now” in the right of home page to pay for it.

□ Setup in the DVR (Fig 3.2.30 DDNS)

DOMAIN: The domain is set in chapter 3. —**Domain setup**. According to the example before, the domain is “dvr.dns2p.com”.

USER ID: The user name of register, which is set in chapter 1. —**Register in the web**. According to the example before, the user ID is “abc”.

GROUP ID: The name of the computer workgroup.

PASSWORD: The password is set in chapter 1. —**Register in the web**. According to the example before, the password is “123456”.

ACTIVATE: Choose the name of website. According to the example before, the website is “dns2p.com”. Then the DVR begins to connect to network and the system displays a sentence—“PLEASE WAIT”.

About two minutes later, the result is displayed in the screen.

If the connection is OK, the system prompts:

DDNS RESULT  
DDNS UPDATE SUCCESS

If the connection fails, the system prompts:

DDNS RESULT  
DDNS UPDATE FAIL!!!

Check the network and the information before, and then try again.

□ Application

Connect the DVR to internet and fill out the IE address column with “\*.dns2p.com” to visit the web client of DVR. Furthermore, user can fill out the address column of net client with “\*.dns2p.com” to remote surveillance. “\*” is the domain set in chapter □—**Domain setup**. According to the example before, fill the IE address column with “dvr.dns2p.com”.

□ **NET PASSWORD:** The initial password is “0000”, the user can change it in this menu. If the user name is “NetUser” when the user login in the computer through network, the corresponding password is set in this menu.

□ **NET CLIENT PORT:** Distribute net client port for each function. If router is used in the network, the router’s port which is displayed in this menu must be opened.

```
[SETUP-NETWORK-CLIENT PORT]
PORT AREA      :>7620-7624
PORT1 (LOGON)  :7620
PORT2 (CONTROL):7621
PORT3 (LIVE)   :7622
PORT4 (BACKUP) :7623
PORT5 (PLAY)   :7624
```

Port 1 is used for logon;

Port 2 is used for controlling the DVR;

Port 3 is used for live surveillance;

Port 4 is used for backup;

Port 5 is used for playing back.

□ **NET CLIENT ID:** The default ID is “NetUser”, the user can set other four ID and password for viewing through network. (Fig3.2.31 Net client ID).The login-ID and the password are composed of the letters or number at random. Only the ID set here or the default ID can be used in the remote viewer. The administrator can restrict the other users to remote view through internet with this configuration setup.

□ **NET DVR ID:** The identification of the DVR. You can edit it at will, it can be composed of number, letter and sign.

□ **NET CLIENT ADDR** (address) (Fig3.2.32 Net client address): Fill those options with the network information needed. Use the “Up” “Down” “Left” “Right” and enter key to fill the blank. “<000.000.000.000>” means that any IP address can access the DVR through network. The user can set ten IP address to restrict

other IP access the DVR.

			LIVE
	[SETUP-NETWORK-CLIENT ID] LOGIN ID      PASSWORD		
1			
2			
3			
4			
	2005 / 06 / 20	12 : 30 : 05	

Fig3.2.31 Net client ID

			LIVE
	[SETUP-NETWORK-CLIENT IP] CLIENT 01 IP: 000.000.000.000		
	CLIENT 02 IP: 000.000.000.000		
	CLIENT 03 IP: 000.000.000.000		
	CLIENT 04 IP: 000.000.000.000		
	CLIENT 05 IP: 000.000.000.000		
	CLIENT 06 IP: 000.000.000.000		
	CLIENT 07 IP: 000.000.000.000		
	CLIENT 08 IP: 000.000.000.000		
	CLIENT 09 IP: 000.000.000.000		
	CLIENT 10 IP: 000.000.000.000		
	2005 / 06 / 20	12 : 30 : 05	

Fig3.2.32 Net client address

□ **NETWORK THROUGHPUT:** To setup the transfer speed of DVR in the network. There are nine options to choose: unlimited, 64KBPS, 128KBPS, 256KBPS, 512KBPS, 1MBPS, 2MBPS, 4MBPS, 10MBPS. User can choose the option according to the demand (Fig3.2.33 Setup net work throughput).

### 3.2.6 SETUP-SENSOR/ALARM (Fig3.2.34 Setup sensor/alarm)

#### □ **SENSOR TYPE**

Press enter to visit the next level menu and there are two options to choose: NO and NC.

“NO” means normal open. If “NO” is chosen, the DVR will alarm if the alarm at low level.



			LIVE					
[SETUP SNEZOR/ALARM MOTION MANAGER]								
CHANNEL	1							
NO	12	345	6789	01	2345	6		
ALARM 1 V	■	■	■	■	■	■	■	
ALARM 2	■	■	■	■	■	■	■	
ALARM 3	■	■	■	■	■	■	■	
ALARM 4	■	■	■	■	■	■	■	
ALARM								
ALL	■	■	■	■	■	■	■	
	2005 / 06 / 20		12 : 30 : 05					

			LIVE					
[SETUP-SENSOR/ALARM-SENSOR MANAGER]								
SENSOR	1							
NO	12	345	6789	01	2345	6		
ALARM 1 V	■	■	■	■	■	■	■	
ALARM 2	■	■	■	■	■	■	■	
ALARM 3	■	■	■	■	■	■	■	
ALARM 4	■	■	■	■	■	■	■	
ALARM								
ALL	■	■	■	■	■	■	■	
	2005 / 06 / 20	12 : 30 : 05						

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for alarm 1, any of the 3 sensors is activated, the alarm 1 will send alarm signal.

□ **ALARM BUZZER** (Fig3.2.37 Alarm buzzer)

ON: Start the buzzer when DVR gives alarm

OFF: The buzzer will not be triggered when DVR is alarming

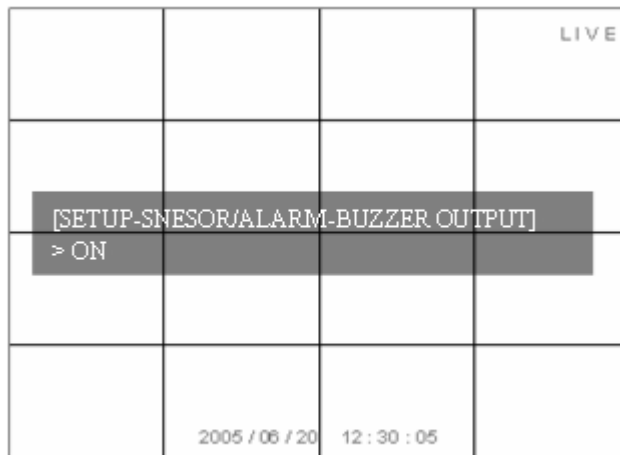


Fig3.2.37 Alarm buzzer

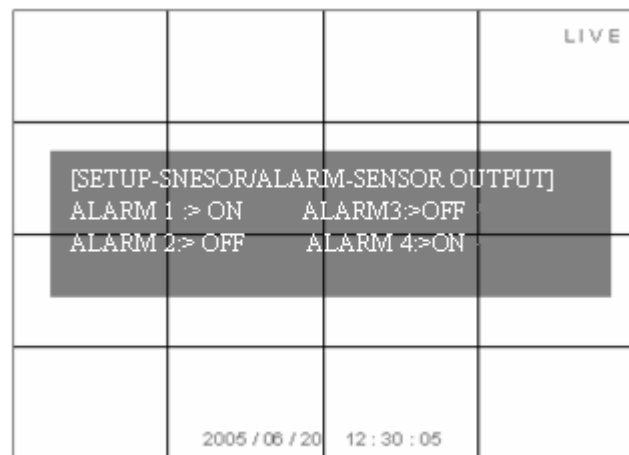


Fig3.2.38 Alarm output

□ **ALARM OUTPUT** (Fig3.2.38 Alarm output)

ON: Alarm on. Only when the alarm output is on, the DVR will give alarm when the sensor is triggered or the motion event occurs.

OFF: Alarm off. The DVR will not send alarm when output is off.



□ **ALARM OUT PERIOD** (Fig3.2.39 Alarm output period)

Alarm continuing time. There are five options to choose: 30 seconds, 1 minute, 3 minutes, 10minutes and Continuous.

			LIVE
[SETUP-SNESOR/ALARM OUT PERIOD]			
>30SEC			
	2005 / 06 / 20	12 : 30 : 05	

Fig3.2.39 Alarm output period

			LIVE
[SETUP-AUDIO]			
CHANNEL	1		
NO	1 2 3 4 5	6 7 8 9	0 1 2 3 4 5 6
AUDIO A	□ □ □ □ □	□ V □ □ □ □	□ □ □ □ □
AUDIO B	□ □ □ □ □	□ V □ □ □ □	□ □ □ □ □
AUDIO C	□ □ □ □ □	□ □ □ □ V □	□ □ □ □ □
AUDIO D	□ □ □ □ □	□ □ □ □ □ V	□ □ □ □ □
	2005 / 06 / 20	12 : 30 : 05	

Fig3.2.40 Audio output

### 3.2.7 SETUP-AUDIO

“■” means unselected, “V” means selected, “Abscissa” means the channel number and “Ordinate” means audio output number. (Fig3.2.40 Audio output)

There are four audio input ports and one audio output port in all. One audio input matches one channel. For example, if user selects audio A for channel 1, channel 1 will record audio A.

### **3.3 Function**

Press the Function button to enter the basic function menu (Fig3.3.1 Function menu), which contains the following items:

- STATUS
- AUDIO
- BACKUP
- PAN/TILT
- ZOOM/FOCUS
- LOG LIST

#### **3.3.1 STATUS**

Press the Info button on the remote controller, the screen will display the firmware version number, HDD status, Network status and record information. (Fig3.3.2 Status view) If CD/DVD driver connected to ATA

interface, there will be three HDDs and one CD-ROM displayed.

			LIVE
		* STATUS	
		* AUDIO	
		* BACKUP	
		* PAN/TILT	
		* ZOOM/FOCUS	
		* SEQUENCE	
		* LOG LIST	
	2005 / 06 / 20	12 : 30 : 05	

Fig3.3.1 Function menu

		[STATUS]	
		S/W VER: V1.0.10-tv_16	
		(06/05/08 10:07)	
		[HDD] A: 150G(63%) B: NONE	
		C: NONE D: NONE	
		NETWORK:	
		MAC: 00.0E.B5.00.06.32	
		DDNS: SERVER (null) FAIL	
		[REC] SIZE 720*576	
		CH RA QUAL CH RA QUAL CH RA QUAL CH RA QUAL	
	1 2 BEST 5 2 BEST 9 2 BEST 13 2 BEST		
	2 2 BEST 6 2 BEST 10 2 BEST 14 2 BEST		
	3 2 BEST 7 2 BEST 11 2 BEST 15 2 BEST		
	4 2 BEST 8 2 BEST 12 2 BEST 16 2 BEST		

Fig3.3.2 Status view

3.3.2 AUDIO

**AUDIO ON:** Activate the audio output; **MUTE:** Disable the audio output

### 3.3.3 BACKUP& VIEW BACKUP

#### □ Backup

				LIVE
		[BACKUP]		
		MEDIA TYPE > CD-R		
		FILE FORMAT > NATIVE		
		BACKUP BASE > FILE		
		CHANNEL > ALL		
		[.]1 [.]5 [.]9 [.]13		
		[.]2 [.]6 [.]10 [.]14		
		[.]3 [.]7 [.]11 [.]15		
		[.]4 [.]8 [.]12 [.]16		
		START: 20060704_112000		
		END: 20060704_134000		
		TOTAL SIZE: 63M		
		BACKUP / 20 CANCEL>		

Fig3.3.3 Setup backup

				LIVE
		[MEDIA TYPE]		
		>CD-R		
		>CD-RW		
		>DVD-R		
		>DVD-RW		
		>USB MEMORY		
		2005 / 06 / 20	12 : 30 : 05	

Fig3.3.4 Setup media type

Press the Backup button (Fig3.3.3 Setup backup). This DVR support five media types: **CD-R**, **CD-RW**, **DVD-R**, **DVD- RW**, **USB-MEMORY** (Contain USB disk and mobile hard disk), and support backup to DVD-RW, CD-RW, internally and as well as USB externally. Please refer to list of compatible DVD-RW, CD-RW, which may be updated at times.

- **MEDIA TYPE:** Press Enter button to access the next menu (Fig3.3.4 Setup media type), if you plan to

backup in CD-R, please choose CD-R; if you plan to backup in CD-RW, please choose CD-RW, etc...

□ **BACKUP BASE:** If you want to search the file needed to backup by file name, please choose FILE; if you want to search the file needed to backup by time, please choose TIME. Each operation method is in the Chapter—□ **START.**

□ **CHANNEL:** If you want to backup the four channels, please choose ALL, if you want to backup several channels of the four channels, please choose PART. Then please move cursor to the blank of the channel needed to backup. There will be a white dot in the blank before the selected channel.

□ **START:** The backup's beginning; you can choose the file from the file table.

			LIVE
NUM	FILELIST	BACKUP	1/175
0000	20060704_112000	7M C L W	
0001	20060704_134000	56M C L	
0002	20060704_134322	38M C L	
0003	20060704_135000	187M C L	
0004	20060704_145833	22M C L	
0005	20060704_150013	3M C L	
0006	20060704_100000	434M C L	
0007	20060704_101156	12M C L	
0008	20060704_150000	254M C L	
0009	20060704_152535	33M C L	
PGDN: < PGUP: > LAST: << FIRST: >>			
2005 / 06 / 20		12 : 30 : 05	

Fig3.3.5 Backup start(file)

						LIVE
CALENDAR—BACKUP						
<<2006-08>>						
SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		
2005 / 06 / 20		12 : 30 : 05				

Fig3.3.6 Backup start(calendar)

- If the backup base is “FILE”, the “START” choose menu is as Fig3.3.5 Backup start (file) showing.
- If the backup base is “TIME”, the “START” choose menu is as Fig3.3.6 Backup start (calendar) and Fig3.3.7 Backup start (time) showing. First, choose the date, second, choose the time.

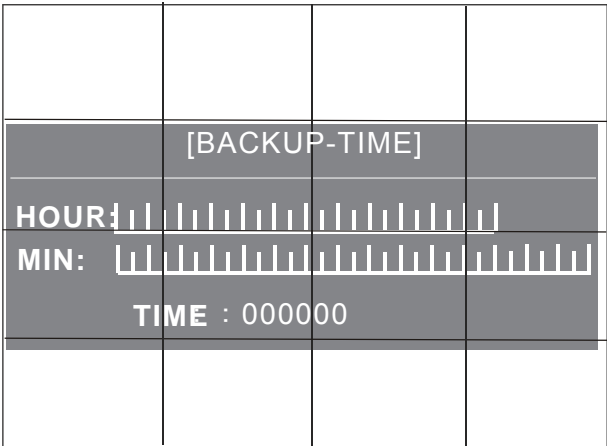


Fig3.3.7 Backup start(time)

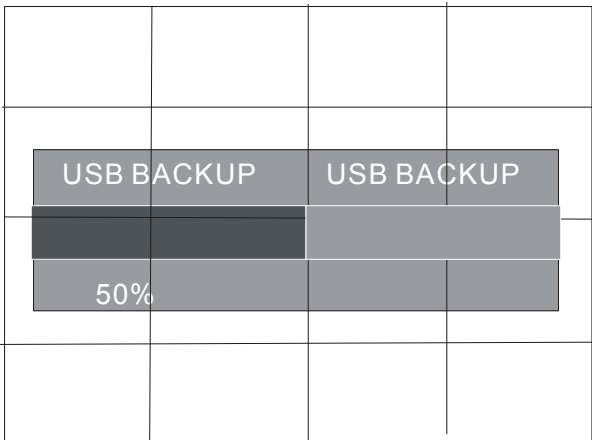


Fig3.3.8 USB Backup process

- **END:** The backup’s end, the setup method is the same as the START.

After the setup of MEDIA TYPE, FILE FORMAT, BACKUP BASE, CHANNEL, START, END finished, the DVR is ready to backup.

- **BACKUP**

Press the BACKUP button, the DVR begins to backup; there is a schedule of backup progress on the

screen in the same time with backup. The USB backup process is as the Fig3.3.8 USB backup process showing, that is the same as backup with the CD/DVD driver.


When the backup is over, a dialogue box will pop up. If the user backup in the USB memory, the sentence in the dialogue box is as following:

“FLASH  
BACKUP OK”

So far, the backup is completed.

☐ **Cancel**

If the user wants to change the backup file, please move cursor to “CANCEL” and press “ENTER” button to cancel the file selected before.

 **Attention:** Only the CD-R or CD-RW can be used when the user backup file with CD driver;  
Only the CD-R, CD-RW, DVD-R or DVD-RW can be used when the user backup file with DVD driver.

☐ View backup

The software to view the backup recording is packed automatically in the file.



Icon of the backup viewer: — “Backup\_viewer”

☐ Brief introduction of buttons



: Play



: Pause



: Stop



: Fast backward



: Step backward



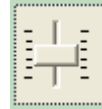
: Step forward



: Fast forward



: Verify the record is changed or not



: Volume control



: Snap shot



: Number button



: 1-channel/4-channel/9-channel/16-channel mode

You can use number button to choose the channel which you want to see.

The main menu of the Backup viewer:

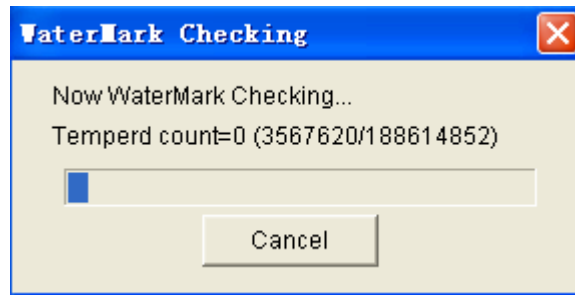




□ Particular introduction of **W.M Check, SnapShot**.

□ W.M Check (Water Mark Check)

When the backup file is paused, click this button to check water mark:



After a few minute, the result will pop up. If the backup file is changed or moved, the system will pop up “Watermark Check Fail”, if the backup file was not changed or moved, the system will prompt “Watermark Check Ok”.

☐ SnapShot: Click **SnapShot** button, a picture pops up for saving or printing. The user can select directory to **save**, and also can **print** it directly.

☐ Snap Again:

If you want to snap the next picture, Please press the “**Snap Again**” button.

☐ Save:

When you click the “**OK**” button, a dialog box pops up for saving place. Fill the file name and choose the file type, then click “Save” of the dialog box.

☐ Print:

When you click the **Print** button, the system will display the setup of the printer. If you want to print this picture, press PRINT, then the dialog box of printer setup will be displayed. If you do not want to print it,

please press CANCEL.

#### **3.3.4 PAN/TILT**

Move cursor to PAN/TILT in the function menu, press Enter button to access this menu (Fig3.3.9 PAN/TILT) to control the Fast Speed Dome. The particular operation is as following:

Switch to the channel which connects to the Fast Speed Dome video output. Through the “Up” “Down” “Left” “Right” button to control the Fast Speed Dome to swing up, down, left or right, press “Enter” button to stop swinging.

The user can also enter this menu directly by pressing the PT button on the front panel or the remote controller.

#### **3.3.5 ZOOM/FOCUS**

Move cursor to ZOOM/FOCUS in the function menu, press Enter button to access this menu (Fig3.3.10 ZOOM/FOCUS) to control the Fast Speed Dome. The particular operation is as following:

Switch to the channel which connects to the Fast Speed Dome video output. Through the “Up” “Down” button to control the Fast Speed Dome to zoom-in and zoom out each. Through “Left” “Right” button to control Fast Speed Dome’s short and long focus each.

The user can also enter this menu directly by pressing the PT button on the front panel or the remote

controller.

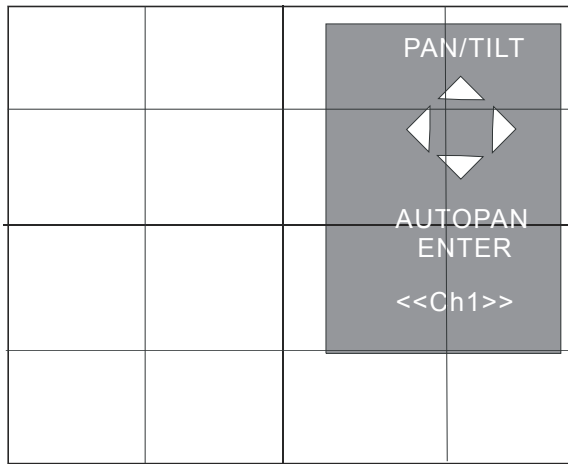


Fig3.3.9 PAN/TILT

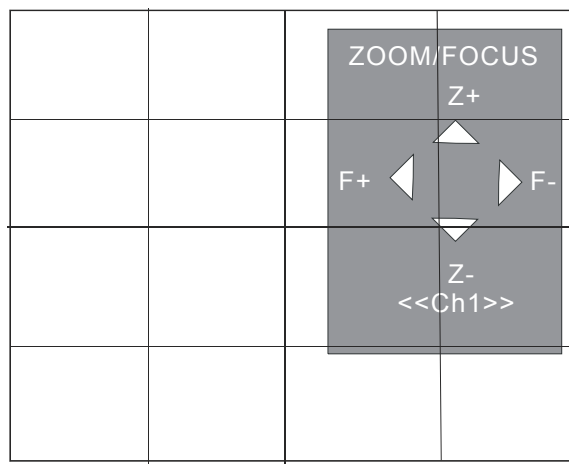


Fig3.3.10 ZOOM/FOCUS

### 3.3.6 SEQUENCE

Press "SEQ" button to enter the sequence play status.

If the current menu is the image of a single channel, press "SEQ" button to play the sixteen channels one by one circularly.

If the current menu is the image of sixteen channels, press "SEQ" button to play the sixteen channels

four channels by four channels circularly.

			LIVE
	[EVENT LOG VIEW]		
	LOG VIEW -> PART		
	MOTION: [ ]	SENSOR: [ ]	
	ALARM: [ ]	V-LOSS: [ ]	
	SYSTEM: [ ]	HDD: [ ]	
	FILE: [ ]	DB: [ ]	
	POWER: [ ]	NET: [ ]	
	START: 2006-08-02 00:00		
	END: 2006-08-02 23:59		
	<OK> <CANCEL>		
	2005 / 08 / 20	12 : 30 : 05	

Fig3.3.11 Setup log file

			LIVE
	EVENT LOG VIEW		
	1820 060704: 152118 FL DEL:/hddb/20060629_083000		
	1819 060704: 152118 FL DEL:/hddb/20060629_082000		
	1818 060704: 152118 FL DEL:/hddb/20060629_081000		
	1817 060704: 152118 FL DEL:/hddb/20060629_075000		
	1816 060704: 152118 FL DEL:/hddb/20060629_074000		
	1815 060704: 152118 FL DEL:/hddb/20060629_073000		
	1814 060704: 152118 FL DEL:/hddb/20060629_072000		
	1813 060704: 152118 FL DEL:/hddb/20060629_071000		
	PAGE 1/182 PGUP:< PGDN:>		
	LAST:<< FIRST:>>		
	2005 / 08 / 20	12 : 30 : 05	

Fig3.3.12 Event log view

### 3.3.7 LOG LIST

Press the Log button on the remote controller, the system will enter the setup menu of log file (Fig3.3.11 Setup log file).

**LOG FILE:** If you choose ALL, the following options in the picture will be displayed, which contains: MOTION, SENSOR, ALARM, V-LOSS, SYSTEM, HDD, FLIE, DB, POWER, NET. If you choose PART, you

should choose the option needed manually. There is a white dot in the blank after the option selected.

**FROM:** The beginning time of the log file, you can use the number key to change the time.

**TO:** The end time of the log file, you can use the number key to change the time.

Press the OK if you setup above over, the system will enter the event log view (Fig3.3.12 Event log view):

Use “Up” “Down” to move the cursor to the log file needed. If there are too much log list, user can use “<” button to page up, use “>” button to page down, use “《” button to jump to the last list, and press “》” button to jump to the first list. Press “Enter” button to see the explanation. (Fig3.3.13 Explanation) Press “Enter” button again to return to the event log list menu.

#### EVENT EXPLAIN

1818 060704: 151610 FL DEL: / hdd b/ 20060629\_081000\_nCm.ps

The particular introduction of each word above:

1818: The number of the deleted file.

060704: The date to delete the file.

151610: The time to delete the file.

FL: It means that file loss event occurred.

DEL: It means that the file was deleted.

Hdd: It means the file was deleted from the hard disk.

20060629\_081000\_nCm.ps: The file name.

### 3.4 Search record

Press the “Search” button on the remote controller, there are three search modes which will be displayed on the screen (Fig3.4.1 Search)

TIME SEARCH  
EVENT SEARCH  
FILE SEARCH

			LIVE
EVENT EXPLAIN			
1818 060704:151610 FL DEL: hddB			
/20060629_083000.nCm.ps			
PRESS ENTER			
	2005 / 06 / 20	12 : 30 : 05	

Fig3.3.13 Explanation

			LIVE
CALENDAR TIME			
<<2006-05>>			
SUN	MON	TUE	WED THU FRI SAT
	01	02	03 04 05 06
07	08	09	10 11 12 13
14	15	16	17 18 19 20
21	22	23	24 25 26 27
28	29	30	31
	2005 / 06 / 20	12 : 30 : 05	

Fig3.4.1 Date choose

 **Attention:** Search all recording by time search or file search, search all event recording by event

**search.**

☐ **TIME SEARCH:**

 **Attention:** All the record can be searched in this menu.

Operation:

☐ **Date choose:**

Press enter to access the CALENDAR TIME menu, Use “Up” “Down” “Left” “Right” to move cursor to the date needed to search.(Fig3.4.1 Date choose). The time which had event record is shown as **yellow** font.

<<2006-05>>: Year-Month

<<: Backward, when the cursor moves to this sign, it will be in yellow, then press enter to make the month backward. For example: the current time is 2006-05, press Enter once, the time will be changed to 2006-04.Press enter again, the time will be changed to 2006-03.

>>: Forward, when the cursor moves to this sign, it will be in yellow, then press enter to make the month forward. For example: the current time is 2006-05, press Enter once, the time will be changed to 2006-06. Press enter again, the time will be changed to 2006-07.

☐ **Time choose**

Below the Year-Month setup, there is the calendar of one month under the Year-Month setup. The date in green has record file, press enter to approach the time choose menu. (Fig3.4.2 Time choose).

The time displayed in **green** has record file. Use “Up” “Down” “Left” “Right” to move to the idiographic time—hour and minute.

☐ Press “Enter” to play the record after the time has been selected.



Press Enter button to view the record chosen, the “Forward” “Backward” “Play/pause” buttons can be used to control the record. Press “stop” button to get back to live picture.

#### □ **EVENT SEARCH**

 **Attention:** Only the alarm event and motion event record can be searched in this menu.

Operation:

□ Select the date, whose method is the same as TIME SEARCH. The time which had event record is shown as yellow font.

□ Press “Enter” to access the event menu after selecting time. (Fig3.4.3 Event choose).

□ Analyze the record information. Take one of the event records information as example.

The meaning of the words:

“0691 060517:113145 FL MD 06”

“0691”: Serial number

“060517”: Date, the first and the second stand for year, the third and the fourth stand for month, the fifth and the sixth stand for day. “060517” means may 17th, 2006.

“113145”: Time, the first and the second stand for hour, the third and the fourth stand for minute, the fifth and the sixth stand for second. “113145” means 11:31:45.

“MD”: Motion detection.

“06”: The length of record time.

□ Select the record and press “Enter” button to view this record.

Use “Up” “Down” to choose the event record, press enter button to view the record chosen, The

“Forward” “Backward” “Play/pause” buttons can be used to control the record. Press “stop” button to get back to live picture.

If there are too many event lists, user can move to the page needed though “PGUP” “PGDN” “LAST” “FIRST”, the meaning of these signs and shortcut keys are in the following table.

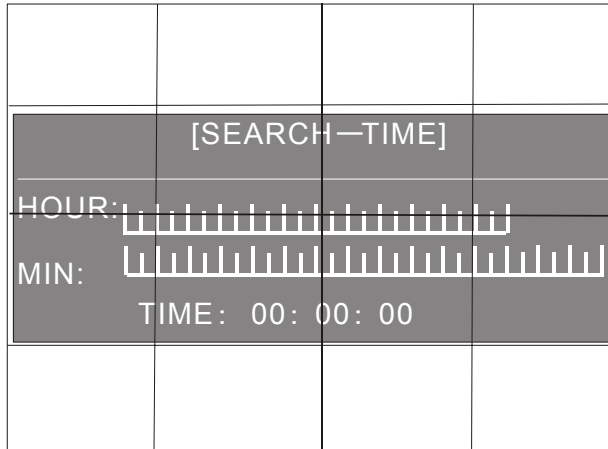


Fig3.4.2 Time choose

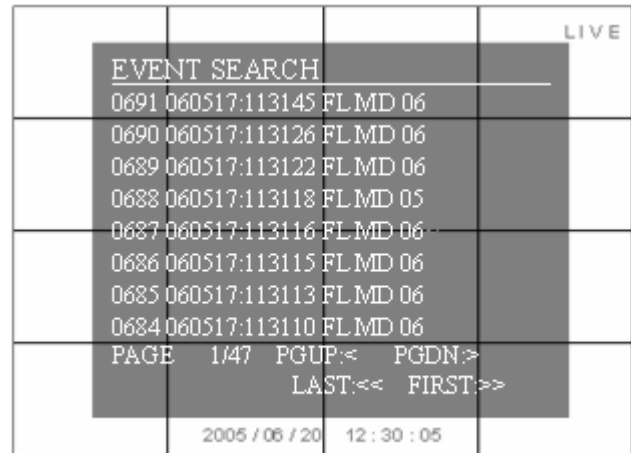


Fig3.4.3 Event choose

Sign	Meaning	Shortcut key
PGUP	Page up, to the frontal	Right button
PGDN	Page down, to the next	Left button
LAST	To the last page	Backward button

FIRST	To the first page	Forward button
-------	-------------------	----------------

## □ FILE SEARCH

 **Attention:** All the record can be searched in this menu.

Operation:

□ Select the date, whose method is the same as TIME SEARCH. The time which had event record is shown as yellow font.

□ Press “Enter” to access the play file list. (Fig3.4.4 File search)

□ Analyze the record information. Take one of the file records information as example.

The meaning of the words:

“194 20060517\_113206 46S D L W”

“194”: Serial number

“20060517”: Date, the ex-four digitals stand for year, the fifth and the sixth stand for month, the seventh and the eighth stand for day. “2006060517” means may 17th, 2006.

“46S”: The length of record time.

“D”: Resolution, D means the 720\*576 in PAL or 720\*480 in NTSC. Please refer to Appendix C for the abbreviations explain.

“L”: Lock. Please refer to Appendix C for the abbreviations explain.

“W”: Water mark. If the option of “water mark” is set as “ON”, the word of “w” would be displayed in the file search menu.

- Select the record and press “Enter” button to view this record.

Use “Up” “Down” to choose the file record, Press enter button to view the record chosen, the “Forward” “Backward” “Play/pause” buttons can be used to control the record. Press “stop” button to back to live picture

If the event file list is too much, user can move to the page needed though “PGUP” “PGDN” “LAST” “FIRST”, the meaning of these signs and shortcut keys is in the table above.

The record was divided into many sections automatically. The default length of one section is ten minutes (600 Seconds). Length may be shorter than 1 hour, depending on actual motion recording, alarm recording and schedule setup.

### **3.5 SPOT**

Connect the DVR to a SPOT monitor by the SPOT port first, and then press the “SPOT” button on the remote controller to setup. (Fig3.5.1 SPOT setup)

There are four options to choose: CHANNEL, SEQ SINGLE, SEQ QUAD and SEQ STOP.

If you choose “CHANNEL”, then you should choose the channel number in the blank below. The spot monitor will output the image of the channel chosen all along.

If you choose “SEQ SINGLE”, the spot monitor will output images of all the channels circularly one by one.

If you choose “SEQ QUAD”, the spot monitor will output images of all the channels circularly by quad.

If you choose “SEQ STOP”, the spot monitor stops sequence playing.

**Attention:** There is no setup menu in the screen of spot monitor.

Fig3.4.4 File search

Fig3.5.1 SPOT setup

## Appendix

### Appendix A Main Standard & Parameter chart


Model				16Channel	
VIDEO					
Input Channel				16CH	
Input Level				1.0Vp-p±10% Composite, 75Ohm Balanced	
Video Standard				Auto / NTSC / PAL	
Main TV Out				1.0Vp-p Composite, 75Ohm Balanced	
Screen Split Control				1, 16Screen	
Screen Rotation Control				1~9Seconds	
Display	Resolution	NTSC		720(H)x480(V)	
		PAL		720(H)x576(V)	
	Speed	NTSC	Live	480FPS	
			Playback	120FPS	
		PAL	Live	400FPS	
			Playback	100FPS	

	Function		Auto Sequence Screen Split, PIP
AUDIO			
Compression			ADPCM
Audio In / Out			4CH /1CH
Input Level			TBD(0.5~1.4Vp-p@20Kohm)
RECORDING			
Compression			MPEG4
Resolution	NTSC		720(H)x480(V), 720(H)x240(V), 360(H)x240(V)
	PAL		720(H)x576(V), 720(H)x288(V), 360(H)x288(V)
Speed	NTSC	360 x240	Max 120FPS
		720 x240	Max 60FPS
		720 x480	Max 30FPS
	PAL	360 x288	Max 100FPS
		720 x288	Max 50FPS
		720 x576	Max 25FPS
Data Size			2~5KB(CIF)
Mode			Continuous, Schedule, Motion detection, Sensor
Schedule			24Groups per day by an hour
Pre-Alarm			5~10Seconds
HDD	Internal Storage		Max. 4HDD

	Speed	5400RPM, 7200RPM
	Type	EIDE compatible
<b>SEARCHING &amp; PLAYBACK</b>		
Searching Method		Time, Event, File
<b>REMOTE SURVEILLANCE</b>		
Monitoring Environment		Client Software, Web Browser
<b>ALARM</b>		
Sensor Input		16Ports
Alarm Output		4 TTL-Out(Programmable), Terminal
Motion Detection		Available For Each Camera Multi Detection Level
<b>CONNECTOR</b>		
Video Input		BNC 16Ports
Main Monitor Output		BNC 1Port
Spot Monitor Output		BNC 1Port
S-Video (Main TV)		BNC 1Port (4Pins mini DIN)
VGA Output		BNC 1 Port (15Pins female DSUB)
Audio Input (Mono)		RCA 4 Audio Jack (Live Only)
Audio Output (Mono)		RCA 1Port
External Control (RS-232C)		OK
Firmware Upgrade		USB 2.0




External Control (RS-422/485)	Terminal Block
Sensor Input	Terminal Block
Alarm Output	Terminal Block
PTZ (RS-485)	2Pins Terminal Block
Ethernet	RJ-45, 10/100Mbps
USB 2.0	2Ports
<i>ELECTRICAL</i>	
Power Source	115~230VAC (50~60Hz)
Power Consumption	TBD(App. 50 ~ 60Watt)
<i>BACKUP</i>	
Digital Backup	Network, External CD/DVD RAM, USB Storage
External CD/DVD RW	USB 2.0
<i>OTHERS</i>	
OS	Embedded Linux
Duplexer or Triplex	Triplex
Control Device	Front key, Remote controller
PTZF	By menu
OSD Language	Multiple
Dimension	295mm(W)x75mm(H)x215mm(D)

 **Attention:** This chart takes 16-channel DVR as example.

## Appendix B Record capability

--how much capability does record engross per hour

Picture Quality	PAL			NTSC		
	Resolution	Total Frame Rate	Capability	Resolution	Total Frame Rate	Capability
Best	720*576	25F/S	3.80G	720*480	30F/S	3.75G
High	720*576	25F/S	1.91G	720*480	30F/S	2.34G
Normal	720*576	25F/S	0.96G	720*480	30F/S	1.20G
Low	720*576	25F/S	0.83G	720*480	30F/S	0.80G
Best	720*288	50F/S	4.10G	720*240	60F/S	3.94G
High	720*288	50F/S	2.60G	720*240	60F/S	2.42G
Normal	720*288	50F/S	1.28G	720*240	60F/S	1.40G
Low	720*288	50F/S	0.98G	720*240	60F/S	0.83G
Best	360*288	100F/S	3.42G	360*240	120F/S	3.62G
High	360*288	100F/S	2.25G	360*240	120F/S	2.27G
Normal	360*288	100F/S	1.21G	360*240	120F/S	1.25G
Low	360*288	100F/S	1.05G	360*240	120F/S	0.98G

 **Note:** The above figures are from our tests which are just for user's reference. Different definition and stabilization (object's movement) of the images will make some kind of different results.

## Appendix C The meaning of some abbreviation

Words	Meaning	Words	Meaning
D	720*576(PAL)/720*480(NTSC)	H	720*288(PAL)/720*240(NTSC)
C	360*288(PAL)/720*240(NTSC)	NT	The event of network
U	Unlock	L	lock
MD	Motion detection	SD	Sensor detection
PW	The event of power on occurred	VL	Video loss
AL	Alarm	DB	The data base recurred or united
HD	The event about HDD occurred	TM	Time change
SY	The event of system setup or the system reset	FL	The event of file occur or get rid of
DVR	Digital video recorder	DEL	Deletion event

# MPEG4 Standalone DVR Password reset instruction:

To the password reset,

Press : [INFOR] + [AUDIO] + [SEARCH] + [STOP] + [4X4] on the remote control.

Select password reset and press [ENTER].

The password will be reset to 0000

***Manual***  
***Of***  
***Remote surveillance***

\*This manual is tailored for 4/9/16 channels digital video recorder

\*This manual takes 16-channel digital video recorder as example

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## Remote live surveillance

This DVR supports remote surveillance through LAN, Intranet and Internet. After connected to the network, the DVR function as a server. Any connected computer, via Internet or LAN, can view the live surveillance, control PTZ in the active-x file downloaded from IE browser, and can playback/backup the recording files from the client software installed in the computer

The DVR supports three remote users' login simultaneously.


### 1 IE remote operation

IE remote operation refer to the active-x file downloaded from IE browser, herein after is abbreviated as "IE-CLIENT"

Functions: Live video and audio;  
Remote PTZF control.

#### 1.1 Install/uninstall IE-CLIENT

##### Install

If it is the first time to use IE-client in one computer or the operation system of computer is reinstalled, fill the IP address of DVR in IE address column and press enter or click , the system will require installing this

software, the dialogue box is as following:



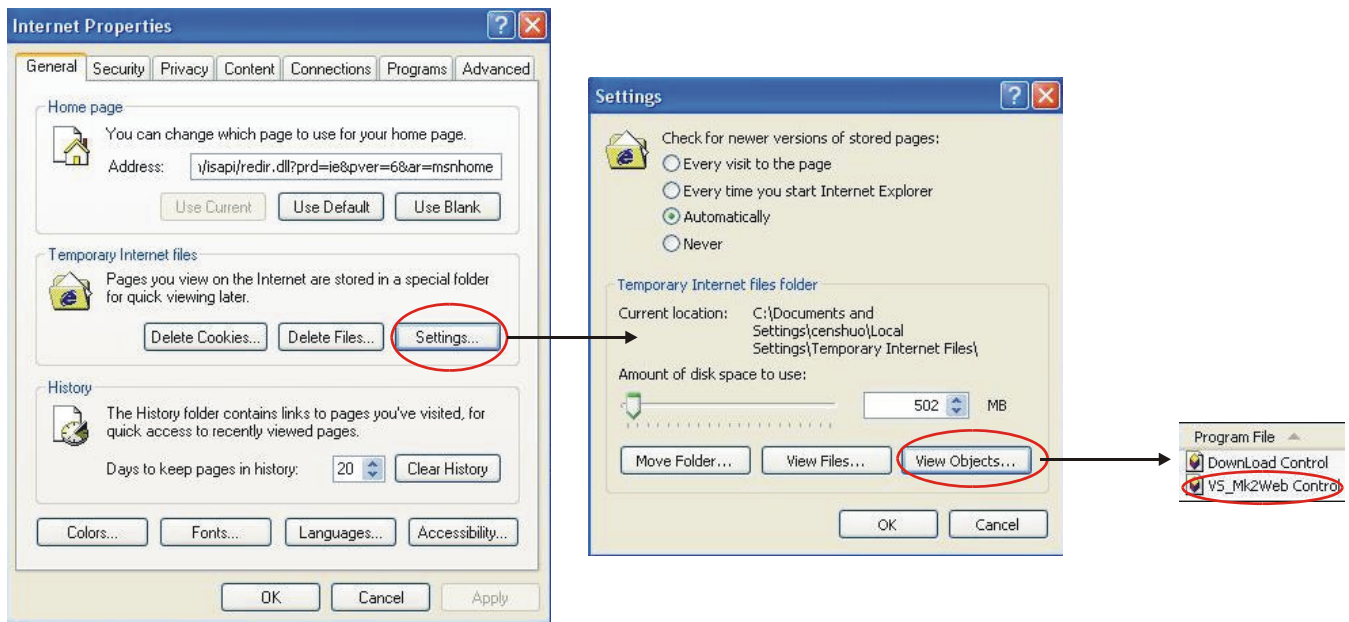
Click "Install" button to install IE client. If click "Don't install" button, user can not operate DVR via IE.

#### Uninstall

If user wants to uninstall IE-Client, please do as following steps:

- ① Click "properties" of internet explorer
- ② Click "Settings" of "Temporary Internet files"
- ③ Click "view objects" to open the folder of the IE-Client
- ④ Delete "VS\_MK2Web control".
- ⑤ Sketch map of uninstall process:

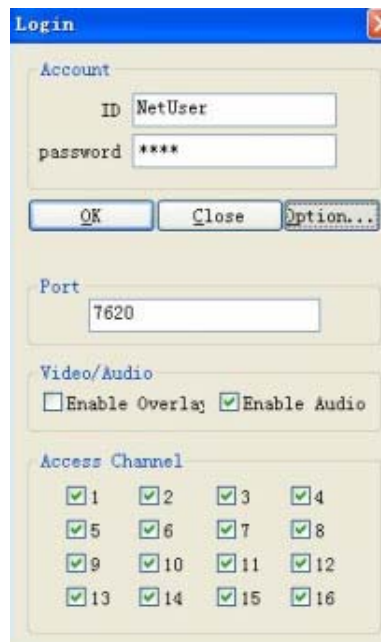




## 1.2 Login

Read the IP address from the DVR and fill out the IE address column with it. Then press enter or click

➔ to visit the Web Client of DVR and a dialog box pops up (Fig 1.1.1 Login).



The image shows a 'Login' dialog box with a blue title bar and a close button. It contains several sections: 'Account' with 'ID' (NetUser) and 'password' (\*\*\*\*) fields; 'Port' with a text box containing '7620'; 'Video/Audio' with 'Enable Overlay' (unchecked) and 'Enable Audio' (checked) checkboxes; and 'Access Channel' with a 4x4 grid of checkboxes numbered 1 to 16, all of which are checked.

Access Channel			
<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4
<input checked="" type="checkbox"/> 5	<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8
<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10	<input checked="" type="checkbox"/> 11	<input checked="" type="checkbox"/> 12
<input checked="" type="checkbox"/> 13	<input checked="" type="checkbox"/> 14	<input checked="" type="checkbox"/> 15	<input checked="" type="checkbox"/> 16

Fig1.1.1 Login

**ID**, **password** and **Port** have been set in the Network setup of DVR

**Enable Overlay:** If user's VGA card supports overlay function, the display performance works better with this option selected. Users have to disable this function unless user's VGA card supports it.

**Enable Audio:** If this option is selected, the live audio will be transmitted to the long-distance surveillance PC.

**1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16:** The channel selected is displayed on the screen. If the DVR is 4-channel, please choose the channel from 1 to 4; if the DVR is 9-channel, please choose the channel from 1 to 9; if the DVR is 16-channel, please choose the channel from 1 to 16. If the user wants to see nothing but channel one, he/she can also choose channel one only.

After all the options above are collocated over, press "OK" button and the screen will display the live picture. The main menu of 4-channel and 9-channel is the same as 16-channel, the following picture takes 16-channel as example. (Fig1.1.2 Live surveillance)



Fig1.1.2 Live surveillance

### 1.3 Particular operation of the IE Client

(1) **Alarm:** If the DVR sends motion alarm, the channel name flashes on the screen and a word is displayed, "MOTION" (Fig1.1.3 Motion alarm).

If the DVR sends sensor alarm, the channel name flashes on the screen and a word is displayed, "SENSOR".












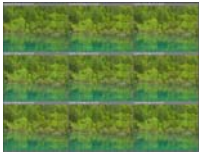



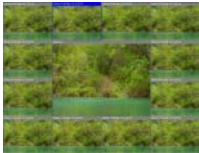


Fig1.1.3 Motion alarm



(2) **Screen mode:**

It enables the user to control the screen mode and size.

Button	Screen mode	Screen
	1-channel	
	4-channel	
	6-channel	
	8-channel	

	9-channel	
	10-channel	
	13-channel	
	16-channel	

(3) **Rotation/Next**





: Rotation. If you press this button, the picture will be displayed from channel 1 to channel 16 in turn. This button will be in yellow when it is selected



: Next. Switch the pictures from current channel to next channel.

(4) **Sound volume**




: The volume is from low to high when the bar is shifted from left to right. You can click the  and  or drag the bar to tune.


(5) **PTZ**

With the PTZ camera, the user can change PAN, TILT, ZOOM, FOCUS and IRIS in remote site.





①

This button is for PAN/TILT and ZOOM adjustment. The button of  makes

ZOOM-IN and the button of  is for ZOOM-OUT.





②

This button is for the FOCUS adjustment,  and  mean short and long each.





- ③ : This button is for the IRIS adjustment. If the light situation of the area where camera is located is too strong, press  to decrease volume of light, and the light situation of the area where camera is located is too weak, press  to increase amount of light.



- ④ : Press this button to set the PTZF (Fig1.1.4 PTZF setting)

**Internal:** If the PC is connected to the DVR in the same local area network, you have to choose **Internal** and do not need to reset the configuration.

**External:** If the PC is connected to the DVR through Internet, you have to choose **External** and setup the PTZF Controller and Address of each channel.

**Channel:** Choose the channel which is connected with speed dome camera.

**PTZ Controller:** Choose the PTZF protocol, which is the same as the protocol set in Fast speed dome and DVR. The protocol set in the PTZF PROTOCOL, which is the submenu of the LIVE menu in the DVR.

**Address:** Choose the PTZF address, which is the same as the address set in Fast speed dome and DVR. The address set in the PTZF ID, which is the submenu of the LIVE menu in the DVR.

Take the channel 1 as example:

If the PTZF protocol set in the DVR is PELCO\_D-2400, it means that the protocol is PELCO\_D and the baud rate is 2400kbps. If the PTZF ID set in the DVR is 01. Press the “Add” button to save the configuration, the PTZF setting is as fig1.1.4 PTZF setting showing.

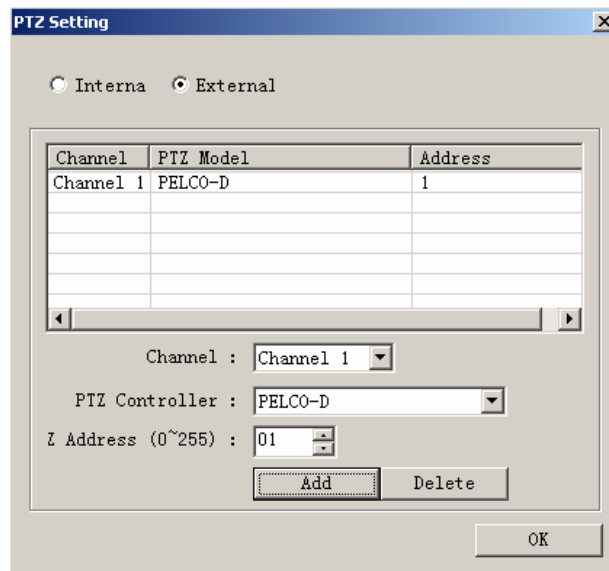


Fig1.1.4 PTZF setting

In the same way, the protocol set in the Fast speed dome should be PELCO\_D, the baud rate should be 2400kpbs, and the address should be 01.

#### (6) **Channel**

You can choose the channel directly which you want to see through the number button from 1 to 16.


(7) **Disconnect/Connect**



: Press this to terminate the connection between DVR and the IE client.



: Press this button to regain the connection between DVR and IE client.

 **Attention:** These two buttons do not appear at the same time. When “Disconnect” shows, it means the IE client is connected with DVR, when “Connect” shows, it means the IE client not connected.

## 2 Remote software operation

Remote software refers to Network Client, hereinafter abbreviated as “Net Client”

Function:







- Live video and audio;
- Remote PTZF control;
- Remote playback and record.



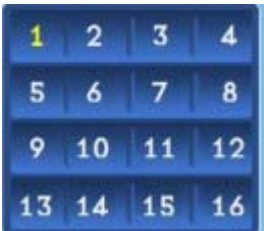

### 2.1 Main screen and the buttons description

The main menu of the 4-channel and 9-channel are the same as 16-channel, the following picture takes 16-channel as example:



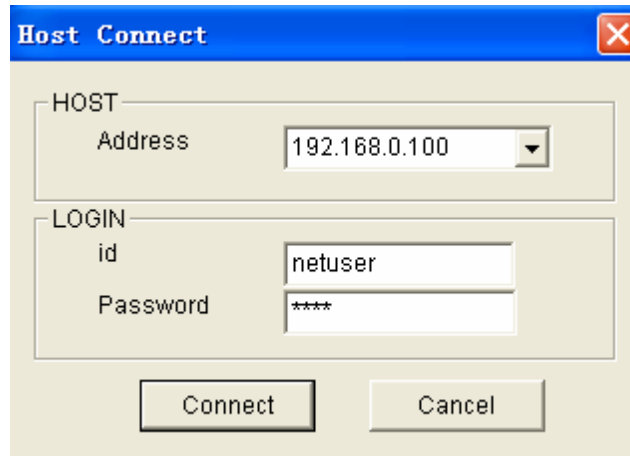
The button description:

Number	Icon	Description	Function
		Live control	Press this button to view the live picture of the DVR, and the user can control the PTZF equipment in the same time.
		Remote-playback	Press this button to playback the record in the DVR via network.
		File backup	Press this button to backup the file from the DVR to computer.
		Local-playback	Press this button to play the file in the mobile disk or local disk of the computer.
		Volume Control	Adjust the volume.
		Snap shot	Catch the picture of the record.

		Connect/ Disconnect	Connect/disconnect the connection between DVR and Net Client.
		Option	Setup the options, such as: control port, initial mode, and audio connect.
		Select Channel	Choose the desired channel.
		Select display mode: full screen / Quad / 9-channel / 16-channel	Choose 1CAM to view the full display of the channel selected, choose 4CAM to view quad displayed in the full screen, choose 9CAM to view the live picture of 9 channels in the full screen, choose 16CAM to view the live picture of 16 channels in the full screen.

## 2.2 Connection

(1) Click “connect” icon in the main window of the Net Client to enter the connection setup menu.

A screenshot of a 'Host Connect' dialog box. The dialog has a blue title bar with the text 'Host Connect' and a red close button. It contains two main sections: 'HOST' and 'LOGIN'. The 'HOST' section has a label 'Address' and a text box containing '192.168.0.100'. The 'LOGIN' section has labels 'id' and 'Password'. The 'id' text box contains 'netuser' and the 'Password' text box contains '\*\*\*\*'. At the bottom of the dialog are two buttons: 'Connect' and 'Cancel'.

(2) Input Address & ID / Password.

The address is the IP address of the DVR, which is set in the TYPE menu, which is the submenu of the NETWORK menu of the DVR.

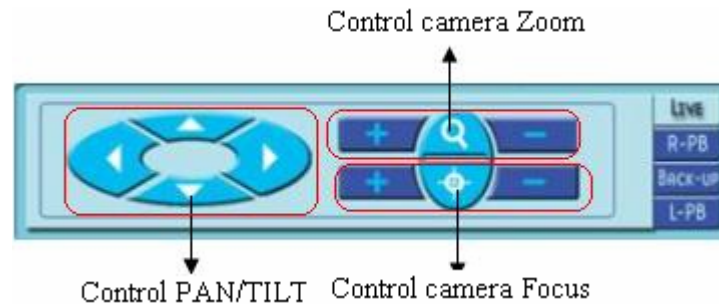
The ID and the password are set in the NET CLIENT ID, which is the submenu of the NETWORK menu of the DVR. Besides the four sets of the ID and password, the user can user “Netuser” as ID, the corresponding password is set in NET PASSWORD menu, which is the submenu of the NETWORK menu of the DVR.



(3) Then, click "Connect" button.

## 2.3 Live

Press LIVE button in the main window of the Net Client, the live picture would display in the screen and the PTZF control button displays at the same time, whose meaning is showing in the following picture.

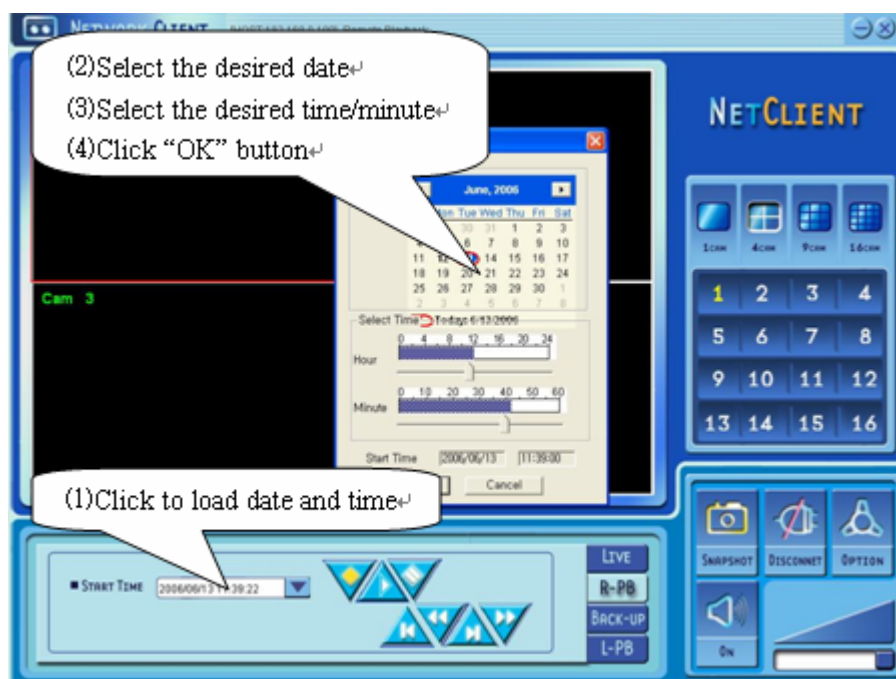


PAN/TILT controller: Click the direction button to swing the Fast speed dome. For example, click leftward button, the camera of the Fast speed dome will swing to left.

Zoom controller: Click the "+" button to zoom in and click "-" button to zoom out.

Focus controller: Click "+" button to lengthen the focus and click "-" button to shorten the focus of the camera.

## 2.4 Remote playback



And then, use the following button to control playback.



: Stop



: Pause



: Reverse by frame



: Fast forward



: Play



: Fast Backward



: Forward by frame

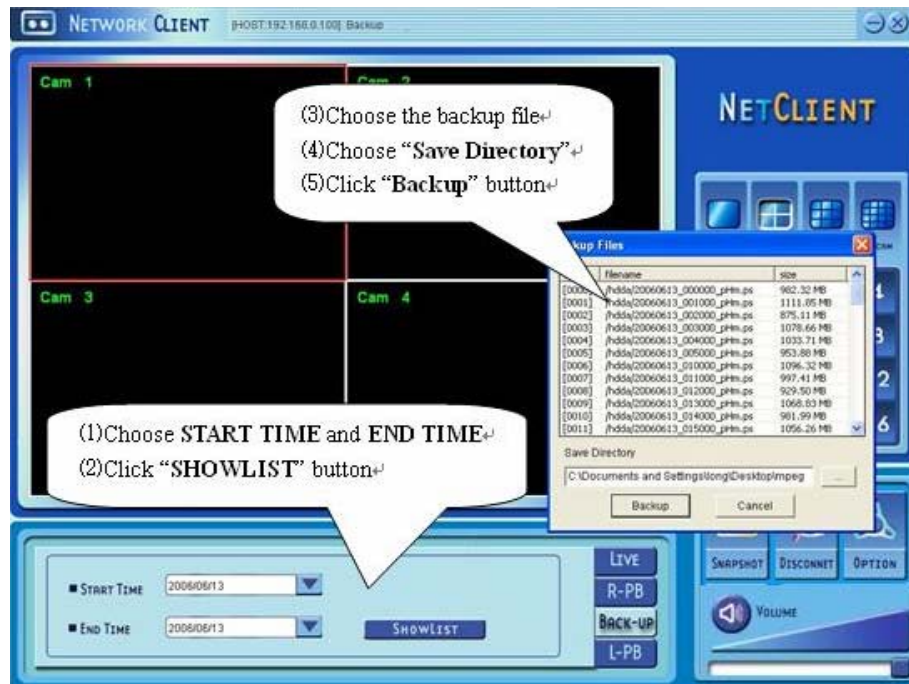


**Attention:**

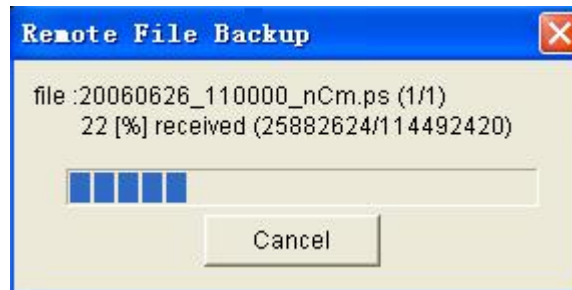
1. The date is around by red line is today;
2. The date which had record is shown as **boldface**.
3. The time which had record is shown as the design of blue alternate with white

**grillwork** below the hour and minute axes.


## 2.5 Backup



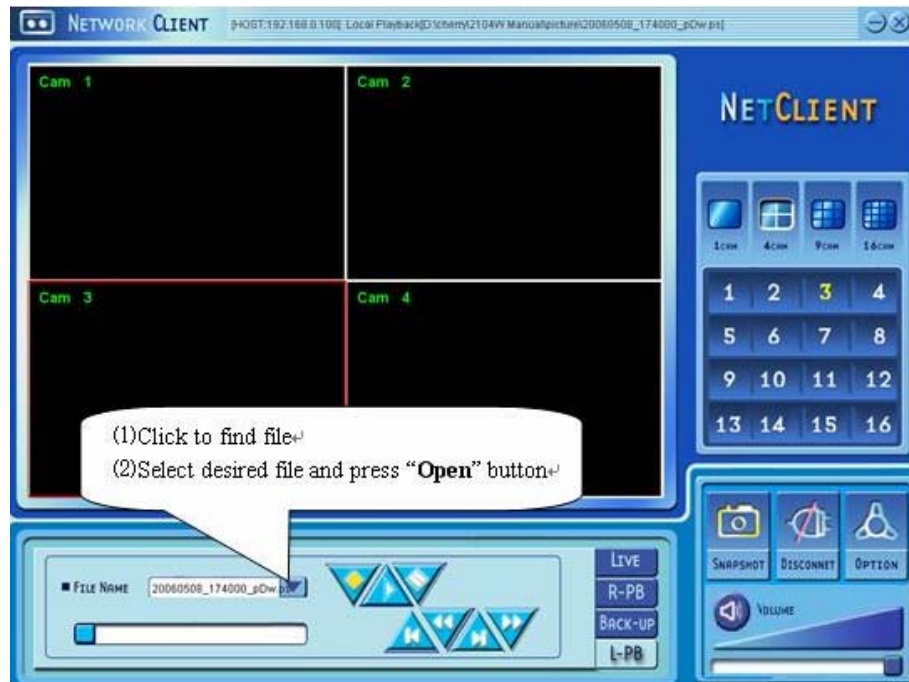
And then, a dialogue box pops up and the backup begins.



The backup file name, backup progress and the size of the backup file are shown in the dialogue box. When the backup progress is over, this dialogue box will disappear. The backup file is the special format which can be played by the Net Client only.

 **Attention:** The speed of the network and the size of the backup file decide the length of the backup time together.

## 2.6 Local playback



**Attention:**

This function can be used not any in network, but also in stand-alone;

The file recorded by this DVR is postscript file, whose suffix is “.ps”. Any postscript file in the HDD or CD/DVD can be played back, containing the HDD or CD/DVD driver connected to ATA and USB interface of computer.

## 2.7 Volume Control



: The audio is disabled.



: The audio is on. The volume is from low to high when the bar is shifted from left to right.

## 2.8 Snap shot

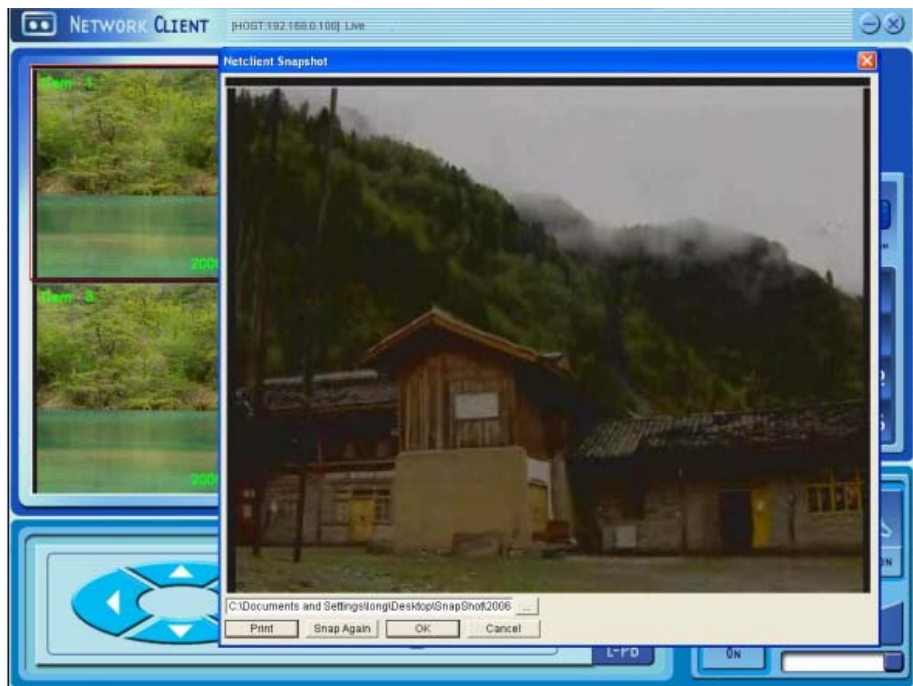


: Capture the picture of the record and the live picture.

Select the channel whose picture is ready for saving or printing first.

And then, press the "Snapshot" button. A window pops up for saving or printing. The user can select directory to save, and also print it directly. If you want to snap the next picture, please press the "**Snap Again**" button.





## 2.9 Option



Press  button to setup the “**control port**”, “**stream port**”, “**initial mode**” and “**audio connect**”.



Control port/stream port: The port must be set as the same with the DVR, and these ports should be opened.

Initial mode: If the DVR is 4-channel, please choose 4; if the DVR is 9-channel, please choose 9; If the DVR is 16-channel, please choose 16.


Audio connect: Only this option is chosen, there is audio output in the Net Client.

## 2.10 Disconnect and exit




When the connection to DVR has been built up, the  button is changed to  button. If you want to disconnect the connection, press this button. A dialogue box pops up——“Are you sure?” Press “**Yes**” to disconnect, press “No” to return to the previous menu.



Click  button to exit this client program. A dialogue box will pop up——“Do you really want to Exit?”

(Y/N)". Press "**Y**" key on keyboard or click "**Yes**" button to exit. Press "**N**" key on keyboard or click "**No**" button to return to the main menu.

 **Attention:** These two buttons do not appear at the same time. When "Disconnect" shows, it means the net client is connected with DVR, when "Connect" shows, it means the net client not connected.